

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
AT	180,374	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
AT	209,422	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
AT	224,627	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
AT	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
AT	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
AT	343,302	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
AT	352826	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
AT	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
AT	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
AT	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
AT	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
AT	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
AT	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
AT	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
AT	413,067	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
AT	157,830	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
AT	354259	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
AT	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
AT	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
AT	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
AT	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
AT	171,831	Hierarchical picture coding types	6	3.14, 3.15, 3.25, 3.26, 3.27, 3.50, 3.55, 3.77, 3.142, 6.3, 7.3.1, 7.3.2, 7.3.2.1.1, 7.3.3, 7.4.1, 7.4.2, 7.4.2.1.1
AT	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
AT	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
AT	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
AT	382242	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
AT	434,288	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
AT	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
AT	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
AT	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
AT	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
AT	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
AT	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BE	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
BE	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
BE	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
BE	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
BE	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
BE	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
BE	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
BE	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
BE	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
BE	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
BE	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
BE	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
BE	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
BE	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
BE	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
BE	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
BE	0460751	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
BE	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
BE	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BE	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
BE	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
BE	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
BE	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
BE	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
BE	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
BE	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
BE	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
BE	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BE	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BE	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BE	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BG	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
BG	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
BG	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
BG	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
BG	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BG	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
BG	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
BG	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
BG	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
BG	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BG	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BG	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BG	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
BG	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CH	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
CH	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
CH	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
CH	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
CH	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
CH	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
CH	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
CH	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
CH	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
CH	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
CH	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
CH	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
CH	1,452,039	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
CH	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
CH	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
CH	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
CH	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CH	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
CH	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
CH	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
CH	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
CH	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
CH	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
CH	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CH	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CH	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
CH	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CH	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CN	100380983	Chroma format sampling	5	3.14, 3.24, 3.43, 3.49, 3.72, 3.76, 3.151, 3.152, 6.2, 7.3, 7.3.2.1.1, 7.4, 7.4.2.1.1, 8, Table 6-1, Fig. 6-3, A.2.4, A.2.5, A.2.6
CN	200510130222.6	Chrominance motion vectors	2	6.2, 7.4.2.1.1, 8, 8.4.1, 8.4.1.4, Table 8-10
CN	200610099715.2	Context-based Adaptive Binary Arithmetic Coding	1	3.138, 3.140, 6.3, 7.3.1, 7.3.3, 7.4.1, 8.1, 8.2, 9.3, 9.3.1, 9.3.1.1, 9.3.2, 9.3.2.3, 9.3.2.5, 9.3.3, 9.3.3.1, 9.3.3.2, 9.3.3.2.1.1, Figs. 6-7, 9-1, 9-2, 9-3, Tables 7-1, 9-11, 9-34, 9-39
CN	200410005357.5	Deblocking filtering	1	7.3.5, 7.4.5, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Tables 7-10 to 7-14
CN	200510116499.3	Deblocking filtering	2	3.41, 3.43, 8, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11, Table 8-17
CY	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
CY	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
CY	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CY	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
CY	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
CY	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
CY	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CY	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CY	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CY	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CY	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CY	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
CZ	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
CZ	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
CZ	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
CZ	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
CZ	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
CZ	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2,
CZ	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4,
CZ	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
CZ	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
CZ	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
CZ	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
CZ	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
CZ	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CZ	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
CZ	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
CZ	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
CZ	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CZ	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CZ	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CZ	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CZ	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
CZ	1406451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
CZ	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
CZ	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
DE	69229229	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
DE	69232357	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
DE	69232784	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
DE	3769306*	Block based intra/inter selection	1	0.2, 0.5, 0.6.1, 0.6.3, 0.6.4, 3.1, 3.66, 3.67, 3.121, 7.4.2.4, 7.4.3.3, 7.4.5, 8, 8.2.4.2.5, 8.3, 8.3.1, 8.3.1.2.3, 8.4, 8.4.1, A.2.1, C.2.2, Tables 7-5, 7-10
DE	3767919*	Block skipping/coded block pattern	1	1, 3.27, 3.53, 3.64, 3.69, 3.75, 3.77, 3.85, 3.98, 3.127, 3.135, 6.1, 6.3, 6.4.1, 7.3.4, 7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.2.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.2, 8.5, Tables 7-13, 7-14
DE	69937462.6	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
DE	69941964.6	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
DE	60318757.9	Coding level syntax	1	3.43, 3.55, 3.56, 3.77, 3.104, 7.3.2.1, 7.4.2.1.1, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.2.7, A.3.1, A.3.2, C.2, C.2.4.1, C.4, C.4.5.1, C.4.5.3, Table A-1
DE	60318758	Coding level syntax	1	3.8, 3.14, 3.43, 3.55, 3.56, 3.77, 3.100, 3.104, 3.123, 3.133, 7.3.2.1.1, 7.4.2.1.1, Annex A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.3.1, A.3.2, Table A-1
DE	50,305,419	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
DE	50306371.1	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
DE	50311129.5	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
DE	60312620.0	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2,
DE	60317585.6	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2,
DE	60311530.6	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
DE	60318918.0	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
DE	60321406.1	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
DE	60328836	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
DE	60328837	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
DE	60328838	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
DE	60329639	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
DE	60329873	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
DE	60334341	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
DE	60302652.4	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
DE	60311734.1	Context-Based Adaptive Variable Length Coding	1	3.14, 3.15, 3.41, 3.153, 3.158, 5.4, 7.3.5.3.1, 7.4.5.3, 8.5, 8.5.1, 8.5.4, 8.5.8, 8.5.10, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-6
DE	60203492.2	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
DE	60214248.2	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
DE	60215241.0	Deblocking filtering	1	1, 3.63, 3.64, 3.98, 3.80, 3.127, 8.0, 8.4, 8.5, 8.6, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11
DE	60220106.3	Deblocking filtering	2	1, 3.63, 3.64, 3.80, 3.98, 3.127, 8, 8.4, 8.5, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, A, Fig. 8-11
DE	60230666.3	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
DE	60234875	Deblocking filtering	2	1, 3.65, 3.66, 3.82, 3.87, 3.100, 3.129, 8, 8.4, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-11
DE	60324480.7	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
DE	60329427.8	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
DE	69127504	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
DE	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DE	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
DE	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
DE	10300533	Direct mode	1	3.42, 3.72, 3.123, 3.124, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 7-18
DE	10300692.3	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2, 8.4.3, Fig. 8-2, 9-2
DE	60311720.1	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
DE	60334330	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
DE	60334336	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DE	60334337	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DE	60334338	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DE	60334339	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DE	60334505	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DE	69,129,595	Field biprediction	25	0.2, 0.5.2, 0.6.2, 0.6.4, 3.8, 3.85, 3.127, 3.136, 3.138, 6.2, 8, 8.4
DE	69130329	Field biprediction	28	0.6, 0.6.2, 0.6.3, 3.75, 3.76, 3.85, 3.120, 3.121, 3.122, 8, 8.2.4.2, 8.4, 8.4.1
DE	69227185	Hierarchical picture coding types	6	3.14, 3.15, 3.25, 3.26, 3.27, 3.50, 3.55, 3.77, 3.142, 6.3, 7.3.1, 7.3.2, 7.3.2.1.1, 7.3.3, 7.4.1, 7.4.2, 7.4.2.1.1
DE	69109346.6*	Hierarchical picture coding types	1	0.2, 3.8, 3.48, 3.53, 3.59, 3.62, 3.63, 3.64, 3.66, 3.67, 3.98, 3.102, 3.134, 7.3.3, 7.4.1, 7.4.3, A.2.1, Table 7-1
DE	10300528.5	Inter prediction	1	3.104, 8, 8.2.1, 8.4, 8.4.1, 8.4.1.2.3, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.2.4.3
DE	10300529.3	Inter prediction	1	1, 3.8, 3.42, 3.136, 7.45, 8.2.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
DE	60310842.3	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
DE	60322276.5	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
DE	60322277.3	Inter prediction	1	3.8, 3.15, 3.27, 3.64, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
DE	60325691.0	Inter prediction	1	3.8, 3.15, 3.27, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2,
DE	60313454.8	Intra prediction	1	3.37, 3.39, 3.75, 5.8, 6.2, 6.3, 7.2, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1 to 8.3.1.2.9, A.2, Tables 8-2, 8-3
DE	10296787.3	Intra prediction modes	1	1, 3.8, 3.27, 3.55, 3.61, 3.77, 3.100, 3.111, 3.136, 3.138, 7.3.2.2, 7.4.2.2, 7.4.5, 8.3, 8.3.1.1, 8.3.1.2, 8.3.2.1, 8.3.2.2, 8.3.3, 8.3.4, 8.4, Table 7-10, 7-11, 7-13, 7-14
DE	60320243.8	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
DE	60332974	Motion vector prediction	2	3.8, 3.41, 3.42, 3.43, 3.77, 3.87, 3.99, 3.123, 3.124, 3.147, 6.4.2, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1, Fig. 6-9, 6-14
DE	60310368.5	NAL unit syntax	1	3.14, 3.41, 3.45, 3.87, 3.143, 6.1, 7.3.1, 7.4.1, B
DE	60332175.5	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
DE	60318307.7	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
DE	69822751.4	Picture order count	8	0.2, 3.14, 3.53, 3.102, 3.104, 3.136, 7.3.2.9.1, 7.4.2.1, 7.4.3, 7.4.1.2.2, 8.2.1
DE	60329239	Reference picture selection	1	1, 3.43, 3.65, 3.66, 3.77, 3.100, 3.108, 3.122, 3.123, 3.138, 3.142, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4, 8.4.2, 8.5
DE	60232681.8	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
DE	69813635.7	Scaling and transformation	1	1, 3.58, 3.71, 3.73, 3.113, 3.132, 3.155, 3.156, 7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8.5.6, 8.5.8, 8.5.11.1, Fig. 8-8, Table 7-2, 8-13
DE	69321781	Scanning pattern	10	3.49, 3.54, 3.76, 3.102, 3.111, 3.130, 6.4.3, 7.4.2.1, 7.4.4, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, A.2.1, Fig. 8-8, Tables 9-6, 9-7, 9-8
DE	60311231.5	SEI message syntax	1	3.1, 3.39, 3.41, 7.3.2.3, 7.3.2.3.1, 7.4.2.3.1, D.1.7, D.2.7
DE	60236886	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
DE	60234196	Slice header syntax	7	3.14, 3.41, 3.43, 3.142, 6.3, 7.1, 7.2, 7.3, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.4, 7.4.5, 9.1
DE	50105422	Transform coefficient scaling and refinement process	15	3.155, 7.3.5.3, 7.4.5.3.1, 8.5.6, 8.5.11.1, Annex G.3.4, G.3.30, G.3.50, G.7, G.7.3.3.4, G.7.3.5.3, G.7.4.3.4, G.7.4.6, G.7.4.5.3.1, G.8, G.8.1.1, G.8.1.2.1, G.8.1.3.1, G.8.1.4.1, G.8.1.5.2, G.8.5.1, G.8.5.1.1, G.8.5.1.1.2, G.8.8.1, G.8.8.2, G.10.1, Table 7-1
DK	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
DK	1853069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
DK	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
DK	1487113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
DK	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
DK	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
DK	1742483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
DK	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
DK	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
DK	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
DK	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
DK	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
DK	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
DK	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
DK	0460751	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
DK	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
DK	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DK	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
DK	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
DK	0443676*	Hierarchical picture coding types	1	0.2, 3.8, 3.48, 3.53, 3.59, 3.62, 3.63, 3.64, 3.66, 3.67, 3.98, 3.102, 3.134, 7.3.3, 7.4.1, 7.4.3, A.2.1, Table 7-1
DK	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
DK	1753244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
DK	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
DK	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
DK	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
DK	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DK	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DK	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DK	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
DK	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
EE	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
EE	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
EE	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
EE	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
EE	E001131	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
EE	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
EE	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
EE	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
EE	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
EE	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
EE	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
EE	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
ES	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
ES	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
ES	1,765,019	Coding level syntax	1	3.8, 3.14, 3.43, 3.55, 3.56, 3.77, 3.100, 3.104, 3.123, 3.133, 7.3.2.1.1, 7.4.2.1.1, Annex A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.3.1, A.3.2, Table A-1
ES	2299170	Coding level syntax	1	3.43, 3.55, 3.56, 3.77, 3.104, 7.3.2.1, 7.4.2.1.1, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.2.7, A.3.1, A.3.2, C.2, C.2.4.1, C.4, C.4.5.1, C.4.5.3, Table A-1
ES	1,401,213	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
ES	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
ES	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
ES	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
ES	2294768	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
ES	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
ES	1742483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
ES	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
ES	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
ES	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
ES	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
ES	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
ES	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
ES	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
ES	1,424,856	Context-Based Adaptive Variable Length Coding	1	3.14, 3.15, 3.41, 3.153, 3.158, 5.4, 7.3.5.3.1, 7.4.5.3, 8.5, 8.5.1, 8.5.4, 8.5.8, 8.5.10, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-6
ES	2,252,666	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
ES	1,515,567	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
ES	2,238,593	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
ES	2,318,055	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
ES	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
ES	2,317,444	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
ES	1,359,767	Direct mode	1	1, 3.8, 3.42, 3.136, 7.45, 8.2.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
ES	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
ES	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
ES	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
ES	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
ES	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
ES	1,450,565	Inter prediction	1	3.8, 3.15, 3.27, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
ES	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
ES	1,739,973	Inter prediction	1	3.8, 3.15, 3.27, 3.64, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
ES	1,510,078	Intra prediction	1	3.37, 3.39, 3.75, 5.8, 6.2, 6.3, 7.2, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1 to 8.3.1.2.9, A.2, Tables 8-2, 8-3
ES	1,499,133	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
ES	1,773,067	Motion vector prediction	2	3.8, 3.41, 3.42, 3.43, 3.77, 3.87, 3.99, 3.123, 3.124, 3.147, 6.4.2, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1, Fig. 6-9, 6-14
ES	1753244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
ES	2297187	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
ES	1742481	Reference picture selection	1	1, 3.43, 3.65, 3.66, 3.77, 3.100, 3.108, 3.122, 3.123, 3.138, 3.142, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4, 8.4.2, 8.5
ES	2195965	Scaling and transformation	1	1, 3.58, 3.71, 3.73, 3.113, 3.132, 3.155, 3.156, 7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8.5.6, 8.5.8, 8.5.11.1, Fig. 8-8, Table 7-2, 8-13
ES	2328118	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
ES	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
ES	1,422,944	Slice header syntax	7	3.14, 3.41, 3.43, 3.142, 6.3, 7.1, 7.2, 7.3, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.4, 7.4.5, 9.1
ES	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
ES	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
ES	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
ES	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
ES	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
ES	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FI	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
FI	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
FI	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
FI	1487113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
FI	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
FI	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
FI	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
FI	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
FI	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
FI	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
FI	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
FI	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
FI	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
FI	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
FI	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
FI	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
FI	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FI	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
FI	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
FI	1,876,831	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FI	1,876,833	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FI	1,876,837	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FI	1,876,838	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FI	1,359,769	Inter prediction	1	1, 3.136, 3.42, 3.8, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2, Fig. 9-2
FI	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
FI	1,499,133	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
FI	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
FI	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
FI	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
FI	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
FI	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FI	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FI	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FI	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FI	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FR	598,904	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
FR	898,426	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
FR	907,289	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
FR	0279053*	Block based intra/inter selection	1	0.2, 0.5, 0.6.1, 0.6.3, 0.6.4, 3.1, 3.66, 3.67, 3.121, 7.4.2.4, 7.4.3.3, 7.4.5, 8, 8.2.4.2.5, 8.3, 8.3.1, 8.3.1.2.3, 8.4, 8.4.1, A.2.1, C.2.2, Tables 7-5, 7-10
FR	2599577*	Block skipping/coded block pattern	1	1, 3.27, 3.53, 3.64, 3.69, 3.75, 3.77, 3.85, 3.98, 3.127, 3.135, 6.1, 6.3, 6.4.1, 7.3.4, 7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.2.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.2, 8.5, Tables 7-13, 7-14
FR	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
FR	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
FR	1,765,018	Coding level syntax	1	3.43, 3.55, 3.56, 3.77, 3.104, 7.3.2.1, 7.4.2.1.1, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.2.7, A.3.1, A.3.2, C.2, C.2.4.1, C.4, C.4.5.1, C.4.5.3, Table A-1
FR	1,765,019	Coding level syntax	1	3.8, 3.14, 3.43, 3.55, 3.56, 3.77, 3.100, 3.104, 3.123, 3.133, 7.3.2.1.1, 7.4.2.1.1, Annex A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.3.1, A.3.2, Table A-1

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
FR	1,742,482	Context based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
FR	1,401,213	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
FR	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
FR	1487113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
FR	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
FR	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
FR	1742483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
FR	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
FR	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
FR	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
FR	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
FR	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
FR	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
FR	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
FR	1,424,856	Context-Based Adaptive Variable Length Coding	1	3.14, 3.15, 3.41, 3.153, 3.158, 5.4, 7.3.5.3.1, 7.4.5.3, 8.5, 8.5.1, 8.5.4, 8.5.8, 8.5.10, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-6
FR	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
FR	1,246,131	Deblocking filtering	1	1, 3.63, 3.64, 3.98, 3.80, 3.127, 8.0, 8.4, 8.5, 8.6, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11
FR	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
FR	1,452,039	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
FR	1,515,567	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
FR	1,596,604	Deblocking filtering	2	1, 3.63, 3.64, 3.80, 3.98, 3.127, 8, 8.4, 8.5, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, A, Fig. 8-11
FR	1,727,373	Deblocking filtering	2	1, 3.65, 3.66, 3.82, 3.87, 3.100, 3.129, 8, 8.4, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-11
FR	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
FR	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
FR	0460751	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
FR	1,359,767	Direct mode	1	1, 3.8, 3.42, 3.136, 7.45, 8.2.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
FR	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
FR	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FR	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
FR	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
FR	1,876,831	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FR	1,876,833	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FR	1,876,837	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FR	1,876,838	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
FR	564,597	Field biprediction	28	0.6, 0.6.2, 0.6.3, 3.75, 3.76, 3.85, 3.120, 3.121, 3.122, 8, 8.2.4.2, 8.4, 8.4.1
FR	573,665	Hierarchical picture coding types	6	3.14, 3.15, 3.25, 3.26, 3.27, 3.50, 3.55, 3.77, 3.142, 6.3, 7.3.1, 7.3.2, 7.3.2.1.1, 7.3.3, 7.4.1, 7.4.2, 7.4.2.1.1
FR	0443676*	Hierarchical picture coding types	1	0.2, 3.8, 3.48, 3.53, 3.59, 3.62, 3.63, 3.64, 3.66, 3.67, 3.98, 3.102, 3.134, 7.3.3, 7.4.1, 7.4.3, A.2.1, Table 7-1
FR	1,359,769	Inter prediction	1	1, 3.136, 3.42, 3.8, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2, Fig. 9-2
FR	1,383,338	Inter prediction	1	3.104, 8, 8.2.1, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.2.4.3, 8.4, 8.4.1, 8.4.1.2.3
FR	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
FR	1,450,565	Inter prediction	1	3.8, 3.15, 3.27, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
FR	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
FR	1,739,973	Inter prediction	1	3.8, 3.15, 3.27, 3.64, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
FR	1,510,078	Intra prediction	1	3.37, 3.39, 3.75, 5.8, 6.2, 6.3, 7.2, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1 to 8.3.1.2.9, A.2, Tables 8-2, 8-3
FR	1,499,133	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
FR	1,773,067	Motion vector prediction	2	3.8, 3.41, 3.42, 3.43, 3.77, 3.87, 3.99, 3.123, 3.124, 3.147, 6.4.2, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1, Fig. 6-9, 6-14
FR	1468567	NAL unit syntax	1	3.14, 3.41, 3.45, 3.87, 3.143, 6.1, 7.3.1, 7.4.1, B
FR	1753244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
FR	1,496,706	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
FR	0909099	Picture order count	8	0.2, 3.14, 3.53, 3.102, 3.104, 3.136, 7.3.2.9.1, 7.4.2.1, 7.4.3, 7.4.1.2.2, 8.2.1
FR	1,742,481	Reference picture selection	1	1, 3.43, 3.65, 3.66, 3.77, 3.100, 3.108, 3.122, 3.123, 3.138, 3.142, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4, 8.4.2, 8.5
FR	1,113,673	Scaling and transformation	1	1, 3.58, 3.71, 3.73, 3.113, 3.132, 3.155, 3.156, 7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8.5.6, 8.5.8, 8.5.11.1, Fig. 8-8, Table 7-2, 8-13
FR	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
FR	580,454	Scanning pattern	10	3.49, 3.54, 3.76, 3.102, 3.111, 3.130, 6.4.3, 7.4.2.1, 7.4.4, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, A.2.1, Fig. 8-8, Tables 9-6, 9-7, 9-8
FR	1468566	SEI message syntax	1	3.1, 3.39, 3.41, 7.3.2.3, 7.3.2.3.1, 7.4.2.3.1, D.1.7, D.2.7
FR	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
FR	1,422,944	Slice header syntax	7	3.14, 3.41, 3.43, 3.142, 6.3, 7.1, 7.2, 7.3, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.4, 7.4.5, 9.1
FR	1,285,537	Transform coefficient scaling and refinement process	15	3.155, 7.3.5.3, 7.4.5.3.1, 8.5.6, 8.5.11.1, Annex G.3.4, G.3.8, G.3.50, G.7, G.7.3.3.4, G.7.3.5.3, G.7.4.3.4, G.7.4.6, G.7.4.5.3.1, G.8, G.8.1.1, G.8.1.2.1, G.8.1.3.1, G.8.1.4.1, G.8.1.5.2, G.8.5.1, G.8.5.1.1, G.8.5.1.1.2, G.8.8.1, G.8.8.2, G.10.1, Table 7-1
FR	630157	Field biprediction	25	0.2, 0.5.2, 0.6.2, 0.6.4, 3.8, 3.85, 3.127, 3.136, 3.138, 6.2, 8, 8.4
FR	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
FR	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FR	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FR	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
FR	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
FR	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GB	598,904	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
GB	2,387,498	Biprediction	8	3.8, 3.42, 3.136, 7.4.5, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.1, 8.4.2.2, 8.4.2.3, 8.4.2.3.2
GB	2,408,889	Biprediction	1	3.8, 3.42, 3.136, 7.4.5, 8.2.1, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.1, 8.4.2.2, 8.4.2.3, 8.4.2.3.2
GB	0279053*	Block based intra/inter selection	1	0.2, 0.5, 0.6.1, 0.6.3, 0.6.4, 3.1, 3.66, 3.67, 3.121, 7.4.2.4, 7.4.3.3, 7.4.5, 8, 8.2.4.2.5, 8.3, 8.3.1, 8.3.1.2.3, 8.4, 8.4.1, A.2.1, C.2.2, Tables 7-5, 7-10
GB	248,711*	Block skipping/coded block pattern	1	1, 3.27, 3.53, 3.64, 3.69, 3.75, 3.77, 3.85, 3.98, 3.127, 3.135, 6.1, 6.3, 6.4.1, 7.3.4, 7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.2.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.2, 8.5, Tables 7-13, 7-14
GB	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
GB	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
GB	1,765,018	Coding level syntax	1	3.43, 3.55, 3.56, 3.77, 3.104, 7.3.2.1, 7.4.2.1.1, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.2.7, A.3.1, A.3.2, C.2, C.2.4.1, C.4, C.4.5.1, C.4.5.3, Table A-1
GB	1,765,019	Coding level syntax	1	3.8, 3.14, 3.43, 3.55, 3.56, 3.77, 3.100, 3.104, 3.123, 3.133, 7.3.2.1.1, 7.4.2.1.1, Annex A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.3.1, A.3.2, Table A-1
GB	1,742,482	Context based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
GB	1,401,213	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
GB	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
GB	1487113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
GB	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
GB	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
GB	1742483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
GB	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
GB	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
GB	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
GB	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
GB	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
GB	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
GB	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
GB	1,424,856	Context-Based Adaptive Variable Length Coding	1	3.14, 3.15, 3.41, 3.153, 3.158, 5.4, 7.3.5.3.1, 7.4.5.3, 8.5, 8.5.1, 8.5.4, 8.5.8, 8.5.10, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-6
GB	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
GB	1,246,131	Deblocking filtering	1	1, 3.63, 3.64, 3.98, 3.80, 3.127, 8.0, 8.4, 8.5, 8.6, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11
GB	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
GB	1,452,039	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
GB	1,515,567	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
GB	1,596,604	Deblocking filtering	2	1, 3.63, 3.64, 3.80, 3.98, 3.127, 8, 8.4, 8.5, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, A, Fig. 8-11
GB	1,727,373	Deblocking filtering	2	1, 3.65, 3.66, 3.82, 3.87, 3.100, 3.129, 8, 8.4, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-11
GB	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
GB	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
GB	0460751	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
GB	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GB	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
GB	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GB	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GB	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GB	2388267	Direct mode	1	1, 7.4.5, 8.2.5, 8.4.1.2.1, 8.4.1.2.3, C.2, Tables 7-10, 7-14
GB	2,393,873	Direct mode	1	3.42, 3.72, 3.123, 3.124, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 7-18
GB	2405549	Direct mode	1	8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
GB	2406459	Direct mode	1	3.42, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
GB	2406460	Direct mode	1	8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
GB	2416455	Direct mode	21	8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
GB	2,430,325	Direct mode	1	1, 3.8, 3.42, 3.136, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
GB	564,597	Field biprediction	28	0.6, 0.6.2, 0.6.3, 3.75, 3.76, 3.85, 3.120, 3.121, 3.122, 8, 8.2.4.2, 8.4, 8.4.1
GB	630157	Field biprediction	25	0.2, 0.5.2, 0.6.2, 0.6.4, 3.8, 3.85, 3.127, 3.136, 3.138, 6.2, 8, 8.4
GB	573,665	Hierarchical picture coding types	6	3.14, 3.15, 3.25, 3.26, 3.27, 3.50, 3.55, 3.77, 3.142, 6.3, 7.3.1, 7.3.2, 7.3.2.1.1, 7.3.3, 7.4.1, 7.4.2, 7.4.2.1.1
GB	0443676*	Hierarchical picture coding types	1	0.2, 3.8, 3.48, 3.53, 3.59, 3.62, 3.63, 3.64, 3.66, 3.67, 3.98, 3.102, 3.134, 7.3.3, 7.4.1, 7.4.3, A.2.1, Table 7-1
GB	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
GB	1,450,565	Inter prediction	1	3.8, 3.15, 3.27, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
GB	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
GB	1,739,973	Inter prediction	1	3.8, 3.15, 3.27, 3.64, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
GB	2422263	Inter prediction	1	1, 3.8, 3.42, 3.136, 8.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.1, 8.4.2
GB	1,510,078	Intra prediction	1	3.37, 3.39, 3.75, 5.8, 6.2, 6.3, 7.2, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1 to 8.3.1.2.9, A.2, Tables 8-2, 8-3
GB	2392042	Intra prediction modes	1	3.55, 3.61, 3.66, 3.69, 3.77, 3.136, 3.138, 7.3.2.2, 7.4.2.2, 8.3.3
GB	1,499,133	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
GB	1,773,067	Motion vector prediction	2	3.8, 3.41, 3.42, 3.43, 3.77, 3.87, 3.99, 3.123, 3.124, 3.147, 6.4.2, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1, Fig. 6-9, 6-14
GB	1468567	NAL unit syntax	1	3.14, 3.41, 3.45, 3.87, 3.143, 6.1, 7.3.1, 7.4.1, B

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
GB	1753244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
GB	1,496,706	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
GB	0909099	Picture order count	8	0.2, 3.14, 3.53, 3.102, 3.104, 3.136, 7.3.2.9.1, 7.4.2.1, 7.4.3, 7.4.1.2.2, 8.2.1
GB	2,412,032	Predictive reference picture selection	1	3.41, 3.100, 7.4.3, 7.4.5.1, 7.4.5.2, 8, 8.2.4, 8.2.4.2, 8.2.4.2.1 to 8.2.4.2.5, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1
GB	2,436,981	Predictive reference picture selection	1	3.41, 3.100, 7.4.3, 7.4.5.1, 7.4.5.2, 8, 8.2.4, 8.2.4.2, 8.2.4.2.1 to 8.2.4.2.5, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1
GB	1,742,481	Reference picture selection	1	1, 3.43, 3.65, 3.66, 3.77, 3.100, 3.108, 3.122, 3.123, 3.138, 3.142, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4, 8.4.2, 8.5
GB	1,113,673	Scaling and transformation	1	1, 3.58, 3.71, 3.73, 3.113, 3.132, 3.155, 3.156, 7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8.5.6, 8.5.8, 8.5.11.1, Fig. 8-8, Table 7-2, 8-13
GB	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
GB	580,454	Scanning pattern	10	3.49, 3.54, 3.76, 3.102, 3.111, 3.130, 6.4.3, 7.4.2.1, 7.4.4, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, A.2.1, Fig. 8-8, Tables 9-6, 9-7, 9-8
GB	1468566	SEI message syntax	1	3.1, 3.39, 3.41, 7.3.2.3, 7.3.2.3.1, 7.4.2.3.1, D.1.7, D.2.7
GB	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
GB	1,422,944	Slice header syntax	7	3.14, 3.41, 3.43, 3.142, 6.3, 7.1, 7.2, 7.3, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.4, 7.4.5, 9.1
GB	1,285,537	Transform coefficient scaling and refinement process	15	3.155, 7.3.5.3, 7.4.5.3.1, 8.5.6, 8.5.11.1, Annex G.3.4, G.3.30, G.3.50, G.7, G.7.3.3.4, G.7.3.5.3, G.7.4.3.4, G.7.4.6, G.7.4.5.3.1, G.8, G.8.1.1, G.8.1.2.1, G.8.1.3.1, G.8.1.4.1, G.8.1.5.2, G.8.5.1, G.8.5.1.1, G.8.5.1.1.2, G.8.8.1, G.8.8.2, G.10.1, Table 7-1
GR	1487113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
GR	3060957	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
GR	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
GR	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
GR	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
GR	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
GR	20060403642	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
GR	3,067,753	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
GR	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GR	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
GR	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
GR	3,060,991	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
GR	1753244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
GR	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
GR	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
GR	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GR	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GR	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GR	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
GR	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
HU	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
HU	1487113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
HU	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
HU	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
HU	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
HU	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
HU	E000227	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
HU	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
HU	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
HU	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
HU	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
HU	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
HU	E002547	Direct mode	1	1, 3.8, 3.42, 3.136, 7.45, 8.2.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
HU	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
HU	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
HU	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
HU	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
HU	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
HU	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
HU	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
HU	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IE	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
IE	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
IE	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
IE	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
IE	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
IE	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
IE	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
IE	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
IE	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
IE	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
IE	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
IE	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
IE	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
IE	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
IE	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
IE	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
IE	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
IE	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
IE	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
IE	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IE	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IE	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IE	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IE	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IT	RM1999B050448	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
IT	RM2002B048140	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
IT	RM2002B052345	Adaptive field/frame coding selection	1	0.6.2, 3.14, 3.17, 3.25, 3.26, 3.27, 3.34, 3.36, 3.49, 3.50, 3.52, 3.55, 3.56, 3.57, 3.77, 3.81, 3.153, 3.154, 6.2, 6.3, 7.3.2.1.1, 7.3.3, 7.3.4, 7.4.2.1.1, 7.4.4, 8, 8.2.4.2.2, 8.4, 8.5, 8.5.2, 8.5.11, 8.5.11.1, 8.5.11.2, Table 8-7
IT	0279053*	Block based intra/inter selection	1	0.2, 0.5, 0.6.1, 0.6.3, 0.6.4, 3.1, 3.66, 3.67, 3.121, 7.4.2.4, 7.4.3.3, 7.4.5, 8, 8.2.4.2.5, 8.3, 8.3.1, 8.3.1.2.3, 8.4, 8.4.1, A.2.1, C.2.2, Tables 7-5, 7-10
IT	248,711*	Block skipping/coded block pattern	1	1, 3.27, 3.53, 3.64, 3.69, 3.75, 3.77, 3.85, 3.98, 3.127, 3.135, 6.1, 6.3, 6.4.1, 7.3.4, 7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.2.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.2, 8.5, Tables 7-13, 7-14
IT	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
IT	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
IT	1,765,018	Coding level syntax	1	3.43, 3.55, 3.56, 3.77, 3.104, 7.3.2.1, 7.4.2.1.1, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.2.7, A.3.1, A.3.2, C.2, C.2.4.1, C.4, C.4.5.1, C.4.5.3, Table A-1
IT	1,765,019	Coding level syntax	1	3.8, 3.14, 3.43, 3.55, 3.56, 3.77, 3.100, 3.104, 3.123, 3.133, 7.3.2.1.1, 7.4.2.1.1, Annex A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.3.1, A.3.2, Table A-1
IT	1,742,482	Context based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
IT	1,401,213	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
IT	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
IT	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
IT	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
IT	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
IT	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
IT	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
IT	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
IT	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
IT	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
IT	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
IT	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
IT	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
IT	1,424,856	Context-Based Adaptive Variable Length Coding	1	3.14, 3.15, 3.41, 3.153, 3.158, 5.4, 7.3.5.3.1, 7.4.5.3, 8.5, 8.5.1, 8.5.4, 8.5.8, 8.5.10, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-6
IT	TO200668156	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
IT	TO2005B070288	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
IT	TO2006B073836	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
IT	TO2009B068457	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
IT	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
IT	MI2009B019817	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
IT	52497 BE/97	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
IT	1,359,767	Direct mode	1	1, 3.8, 3.42, 3.136, 7.45, 8.2.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
IT	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
IT	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IT	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
IT	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
IT	1,876,831	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
IT	1,876,833	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
IT	1,876,837	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
IT	1,876,838	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
IT	0443676*	Hierarchical picture coding types	1	0.2, 3.8, 3.48, 3.53, 3.59, 3.62, 3.63, 3.64, 3.66, 3.67, 3.98, 3.102, 3.134, 7.3.3, 7.4.1, 7.4.3, A.2.1, Table 7-1
IT	RM1998B052096	Hierarchical picture coding types	6	3.14, 3.15, 3.25, 3.26, 3.27, 3.50, 3.55, 3.77, 3.142, 6.3, 7.3.1, 7.3.2, 7.3.2.1.1, 7.3.3, 7.4.1, 7.4.2, 7.4.2.1.1
IT	1,359,769	Inter prediction	1	1, 3.136, 3.42, 3.8, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2, Fig. 9-2
IT	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
IT	1,450,565	Inter prediction	1	3.8, 3.15, 3.27, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
IT	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
IT	1,739,973	Inter prediction	1	3.8, 3.15, 3.27, 3.64, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
IT	1,510,078	Intra prediction	1	3.37, 3.39, 3.75, 5.8, 6.2, 6.3, 7.2, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1 to 8.3.1.2.9, A.2, Tables 8-2, 8-3
IT	1,499,133	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
IT	1,773,067	Motion vector prediction	2	3.8, 3.41, 3.42, 3.43, 3.77, 3.87, 3.99, 3.123, 3.124, 3.147, 6.4.2, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1, Fig. 6-9, 6-14
IT	1,468,567	NAL unit syntax	1	3.14, 3.41, 3.45, 3.87, 3.143, 6.1, 7.3.1, 7.4.1, B
IT	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
IT	1,496,706	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
IT	2004B69800	Picture order count	8	0.2, 3.14, 3.53, 3.102, 3.104, 3.136, 7.3.2.9.1, 7.4.2.1, 7.4.3, 7.4.1.2.2, 8.2.1
IT	1,742,481	Reference picture selection	1	1, 3.43, 3.65, 3.66, 3.77, 3.100, 3.108, 3.122, 3.123, 3.138, 3.142, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4, 8.4.2, 8.5
IT	1,113,673	Scaling and transformation	1	1, 3.58, 3.71, 3.73, 3.113, 3.132, 3.155, 3.156, 7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8.5.6, 8.5.8, 8.5.11.1, Fig. 8-8, Table 7-2, 8-13
IT	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
IT	1,468,566	SEI message syntax	1	3.1, 3.39, 3.41, 7.3.2.3, 7.3.2.3.1, 7.4.2.3.1, D.1.7, D.2.7
IT	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
IT	1,422,944	Slice header syntax	7	3.14, 3.41, 3.43, 3.142, 6.3, 7.1, 7.2, 7.3, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.4, 7.4.5, 9.1
IT	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
IT	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IT	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IT	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IT	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
IT	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
JP	4,435,480	Bipredictive motion compensation	1	8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,348,899	Chroma quantization parameter	1	3.15, 8.5.4, 8.5.8, 8.5.11, 8.5.11.1 and Table 8-15
JP	3,791,922	Chrominance motion vectors	1	6.2, 8.4.1.4, Fig. 6.1, Table 8-9
JP	3,946,721	Chrominance motion vectors	1	6.2, 8.4.1.4, Fig. 6.1, Tables 6-1, 8-10
JP	3,946,758	Chrominance motion vectors	1	6.2, 8.4.1.4, Fig. 6.1, Tables 6-1, 8-10

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	3,946,759	Chrominance motion vectors	1	6.2, 8.4.1.4, Fig. 6.1, Tables 6-1, 8-10
JP	4,558,827	Coded block pattern	1	7.3.5, 7.3.5.3, 7.3.5.3.1, 7.4.5, Tables 7-11, 7-15
JP	4,119,269	Coding level syntax	1	3.32, 3.40, 3.104, 7.3.2.1, 7.4.1.2, 7.4.2.1, 7.4.2.1.1, A.3.1, A.3.2, C.4, C.4.4, Table A-1
JP	3,208,101	Coding mode information	1	3.12, 3.54, 6.4.7, 7.3.5.1, 8.3.1.1, Fig. 8-1, Table 8-2
JP	3,222,876	Coding mode information	1	3.12, 3.54, 6.4.4, 6.4.5, 6.4.7, 7.3.5.1, 8.3.1.1, Fig. 8-1, Table 8-2
JP	3,527,454	Coding mode information	1	3.11, 3.12, 6.4.7, 7.3.5.1, 7.3.5.3, 8.3.1, 8.3.1.1, 8.3.1.2, Fig. 8-1, Table 8-2
JP	3,078,692	Context-based Adaptive Binary Arithmetic Coding	1	4.1, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, 9.3.3.2.2, Figs. 9-3, 9-4, Table 9-35
JP	3,491,001	Context-based Adaptive Binary Arithmetic Coding	2	7.3.3, 7.4.3, 9.3.1.1, Tables 9-11 to 9-15
JP	3,807,342	Context-based Adaptive Binary Arithmetic Coding	2	3.136, 7.3.2.8, 7.3.4, 7.4.3, 9.3, 9.3.1, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.2, Fig. 9-1, Tables 9-12 to 9-23, 9-25, 9-30
JP	3,989,485	Context-based Adaptive Binary Arithmetic Coding	9	9.3, 9.3.1.1, 9.3.3.2, 9.3.3.2.1, Figs. 9-2, 9-3, Table 9-35
JP	4,054,345	Context-based Adaptive Binary Arithmetic Coding	1	9.3, 9.3.1.1, 9.3.3.1, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Figs. 9-1, 9-2, 9-3
JP	4,057,595	Context-based Adaptive Binary Arithmetic Coding	3	7.3.5.3.2, 7.4.5.3.2, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.3, Figs. 9-1, 9-3, 9-5, Table 9-25
JP	4,090,862	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.77, 3.155, 7.3.5.3.3, 7.4.5.3.3, 8.5.6, 9.3, 9.3.1, 9.3.3.1, 9.3.3.1.3, 9.3.3.2.1.1, Fig. 8-8, Table 8-13
JP	4,091,074	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.77, 3.155, 7.3.5.3.3, 7.4.5.3.3, 8.5.6, 9.3, 9.3.1, 9.3.3.1, 9.3.3.1.3, 9.3.3.2.1.1, Fig. 8-8, Table 8-13
JP	4,091,107	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.77, 3.155, 7.3.5.3.3, 7.4.5.3.3, 8.5.6, 9.3, 9.3.1, 9.3.3.1, 9.3.3.1.3, 9.3.3.2.1.1, Fig. 8-8, Table 8-13
JP	4,091,108	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.77, 3.155, 7.3.5.3.3, 7.4.5.3.3, 8.5.6, 9.3, 9.3.1, 9.3.3.1, 9.3.3.1.3, 9.3.3.2.1.1, Fig. 8-8, Table 8-13
JP	4,142,180	Context-based Adaptive Binary Arithmetic Coding	1	2.1.1, 2.1.2, 8.4.1, 8.4.1.3, 8.4.1.3.1, 9.3.2, 9.3.2.3, 9.3.3.1, 9.3.3.1.1.7, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-3, Tables 9-11, 9-25, 9-30, 9-35, 9-36
JP	4,184,388	Context-based Adaptive Binary Arithmetic Coding	1	2.1.1, 2.1.2, 8.4.1, 8.4.1.3, 8.4.1.3.1, 9.3.2, 9.3.2.3, 9.3.3.1, 9.3.3.1.1.7, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-3, Table 9-11, 9-34, 9-39, 9-44, 9-45
JP	4,184,389	Context-based Adaptive Binary Arithmetic Coding	1	2.1.1, 2.1.2, 8.4.1, 8.4.1.3, 8.4.1.3.1, 9.3.2, 9.3.2.3, 9.3.3.1, 9.3.3.1.1.7, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-3, Tables 9-11, 9-34, 9-39, 9-44, 9-45
JP	4,211,780	Context-based Adaptive Binary Arithmetic Coding	1	3.138, 7.3.2.8, 7.4.3, 9.3, 9.3.1.1, 9.3.3.1, 9.3.3.2
JP	4,211,873	Context-based Adaptive Binary Arithmetic Coding	1	3.136, 7.3.2.8, 7.4.3, 9.3, 9.3.1.1, 9.3.3.1, 9.3.3.2
JP	4,295,356	Context-based Adaptive Binary Arithmetic Coding	1	7.3.5.3.3, 7.4.5.3.3, 9.3, 9.3.1, 9.3.2, 9.3.2.3, 9.3.2.4, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.3, Figs. 9-1, 9-3, 9-5, Table 9-34
JP	4,313,757	Context-based Adaptive Binary Arithmetic Coding	1	7.3.5.3.3, 7.4.5.3.3, 9.3, 9.3.1, 9.3.2, 9.3.2.3, 9.3.2.4, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.3, Figs. 9-1, 9-3, 9-5, Table 9-34

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,313,771	Context-based Adaptive Binary Arithmetic Coding	1	7.3.5.3.3, 7.4.5.3.3, 9.3, 9.3.1, 9.3.2, 9.3.2.3, 9.3.2.4, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.3, Figs. 9-1, 9-3, 9-5, Table 9-34
JP	4,100,552	Context-Based Adaptive Variable Length Coding	1	3.153, 7.4.3.5.1, 9.2, 9.2.3, Table 9-10
JP	4,130,780	Context-Based Adaptive Variable Length Coding	1	3.153, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.1, Table 9-5
JP	4,158,985	Context-Based Adaptive Variable Length Coding	1	3.130, 3.155, 3.156, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.3, 9.2.4, Table 9-10
JP	4,158,986	Context-Based Adaptive Variable Length Coding	1	3.153, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.3, Table 9-10
JP	4,158,993	Context-Based Adaptive Variable Length Coding	1	3.130, 3.155, 3.156, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.3, 9.2.4, Table 9-10
JP	4,158,994	Context-Based Adaptive Variable Length Coding	1	3.130, 3.155, 3.156, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.3, 9.2.4, Table 9-10
JP	4,158,996	Context-Based Adaptive Variable Length Coding	1	3.153, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.3, 9.2.4, Table 9-10
JP	4,158,998	Context-Based Adaptive Variable Length Coding	1	3.130, 3.155, 3.156, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
JP	4,185,106	Context-Based Adaptive Variable Length Coding	1	3.155, 7.3.5.3.1, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
JP	4,185,560	Context-Based Adaptive Variable Length Coding	1	3.155, 7.3.5.3.1, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
JP	4,185,561	Context-Based Adaptive Variable Length Coding	1	3.155, 7.3.5.3.1, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
JP	4,185,563	Context-Based Adaptive Variable Length Coding	1	3.155, 7.3.5.3.1, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
JP	4,185,564	Context-Based Adaptive Variable Length Coding	1	3.155, 7.3.5.3.1, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
JP	4,197,262	Context-Based Adaptive Variable Length Coding	1	3.136, 7.3.3, 7.3.5, 7.3.5.3.2, 7.4.3, 9.3, 9.3.1.1, 9.3.3.2, 9.3.3.2.1.1, Table 9-45
JP	4,197,345	Context-Based Adaptive Variable Length Coding	1	3.136, 7.3.3, 7.3.5, 7.3.5.3.2, 7.4.3, 9.3, 9.3.1.1, 9.3.3.2, 9.3.3.2.1.1, Table 9-45
JP	4,368,575	Context-Based Adaptive Variable Length Coding	1	3.15, 3.161, 6.2.2, 8.5.5, 9.2, 9.2.2, 9.2.2.1, 9.2.4, Table 9-6
JP	4,382,864	Context-Based Adaptive Variable Length Coding	1	3.102, 3.136, 3.155, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
JP	4,388,771	Context-Based Adaptive Variable Length Coding	1	7.3.5.3.2, 7.4.5.3.2, 8.5, 8.5.1, 9.2, 9.2.3, Tables 9-7, 9-8
JP	4,465,026	Context-Based Adaptive Variable Length Coding	1	3.155, 6.4.7, 7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
JP	4,515,994	Context-Based Adaptive Variable Length Coding	1	3.153, 7.3.5.3.1, 8.5.5, 9.2, 9.2.2, 9.2.2.1, 9.2.3 and 9.2.4 and Table 9-10
JP	2,728,619	Deblocking filtering	7	7.4.3, 8.7, 8.7.2, 8.7.2.3
JP	3,664,626	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4
JP	3,688,248	Deblocking filtering	3	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11
JP	3,688,283	Deblocking filtering	3	8.7, 8.7.1, 8.7.2.1, Figs. 8-10, 8-11
JP	3,688,288	Deblocking filtering	2	8.7, 8.7.1, 8.7.2.1, Figs. 8-10, 8-11

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	3,710,464	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4
JP	3,714,944	Deblocking filtering	2	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11
JP	3,756,475	Deblocking filtering	1	3.14, 3.37, 3.38, 3.121, 3.136, 7.3.2.2, 7.3.3, 7.4.2.2, 7.4.3, 8.7
JP	3,769,534	Deblocking filtering	1	3.37, 3.102, 7.4.3, 8.7, 8.7.2, 8.7.2.2, Fig. 8-10, Table 8-16
JP	4,009,650	Deblocking filtering	1	8.7, 8.7.2.1, Fig. 8-10
JP	4,120,989	Deblocking filtering	2	3.98, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
JP	4,372,019	Deblocking filtering	2	8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-17
JP	4,372,197	Deblocking filtering	2	8.7, 8.7.1, 8.7.2.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
JP	4,454,678	Deblocking filtering	1	8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Annex G.3.19 – 3.22 G.7.4.6, G.8.1.3, G.8.1.3.2, G.8.7.1, G.8.7.4, G.8.7.4.1, G.8.7.4.2, G.8.7.4.3, Figs. 8-10, 8-11, Tables 8-17, G-5
JP	4,462,914	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4
JP	4,562,785	Deblocking filtering	1	3.39, 3.104, 7.4.3, 8.7, 8.7.2, 8.7.2.2 and Figure 8-10 and Table 8-16
JP	4,580,626	Deblocking filtering	2	3.8, 3.63, 3.102, 3.155, 8.2.4, 8.2.4.2.3, 8.4.2.1, 8.7 and 8.7.2.1, Table 7-14
JP	4,580,903	Deblocking filtering	1	3.65, 3.104, 7.3.5.3.1, 8.2.4, 8.2.4.2.3, 8.4.2.1, 8.7 and 8.7.2.1
JP	4,562,999	Decoded picture buffer	1	3.40, 3.65 3.96, 3.123, 7.3.1, 7.4.1, Annex C.4.5.1, C.4.5.2 and C.4.5.3
JP	3,513,148	Decoder buffer conformance	3	3.38, 3.62, 7.3.3.3, C, C.2, C.4.4, Fig. C-2, Table 7-1
JP	3,534,742	Decoder buffer conformance	1	3.38, C, C.1, C.1.2, C.2, C.2.2, D, D.1, D.1.2, Fig. C-2, Table 7-1
JP	3,162,110	Delay Parameter	1	C, C.1.1, C.1.2, Fig. C-2
JP	3,797,209	Deriving chroma motion vectors	6	3.24, 3.76, 3.77, 6.2, 7.4.2.1.1, 8.4, 8.4.1.4, Tables 6-1, 8-10
JP	4,625,101	Deriving direct mode motion vectors	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	4,625,102	Deriving direct mode motion vectors	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	4,625,103	Deriving direct mode motion vectors	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	4,625,104	Deriving direct mode motion vectors	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	4,625,131	Deriving direct mode motion vectors	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	4,625,132	Deriving direct mode motion vectors	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	4,495,087	Deriving luma motion vectors	1	8.2.5, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Annex C, C.4.1
JP	4,585,047	Deriving luma motion vectors	1	6.4.8, 8.4.1, 8.4.1.1, 8.4.1.3.1 and Figure 6-12
JP	4,594,448	Deriving luma motion vectors	1	6.4.8, 8.4.1, 8.4.1.3.1 and Figure 6-12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,594,449	Deriving luma motion vectors	1	6.4.8, 8.4.1, 8.4.1.1, 8.4.1.3.1 and Figure 6-12
JP	4,598,160	Deriving luma motion vectors	1	6.4.8, 8.4.1, 8.4.1.3.1 and Figure 6-12
JP	4,625,100	Deriving luma motion vectors	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	3,824,268	Deriving motion vectors	1	8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
JP	3,884,472	Deriving motion vectors	3	8.2.1, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
JP	3,878,591	Direct mode	3	3.104, 8.2.1, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
JP	3,958,690	Direct mode	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
JP	4,020,789	Direct mode	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
JP	4,216,852	Direct mode	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 8-6, 8-8
JP	4,363,326	Direct mode	4	8.2, 8.4.1.2, 8.4.1.2.2, 8.4.1.3, 8.4.1.3.2, 8.4.2
JP	4,363,484	Direct mode	4	8.2, 8.4.1.2, 8.4.1.2.2, 8.4.1.3, 8.4.1.3.2, 8.4.2
JP	4,522,658	Direct mode	12	3.8, 3.13, 3.44, 3.100, 3.109, 7.3.3, 7.4.3, 8.4.1.2, 8.4.1.2.2, 8.4.1.2.3, 8.4.1.3, 8.4.1.3.1
JP	2,746,749	Field biprediction	25	3.37, 3.48, 3.127, 8.4, 8.4.2, 8.4.2.1, 8.4.2.2, 8.4.2.2.1, 8.4.2.3, 8.4.2.3.1, 8.4.2.3.2, 8.5, 8.5.1
JP	3,174,586*	Hierarchical picture coding types	1	3.6, 3.55, 3.89, 7.3.2, 7.3.5, 7.3.5.3, 7.4.2.4, 7.4.5, Tables 7-2, 7-7
JP	4,489,794	HRD parameters	1	7.3.2.1.1, 8.1, Annex C, C.3, C.4, E, E.1.2, E.2.2, Figure C-2, Table 7-1
JP	4,275,719	IDR picture	1	3.62, 3.63, 3.66, 3.97, 3.102, 3.121, 7.3.1, 7.4.1, 8.2.1.3, 8.2.5, C.4.4, Table 7-1
JP	4,560,134	IDR picture	1	7.3.1, 7.4.1, 8.2.1.3, 8.2.5, C.4.4 and Table 7-1
JP	3,277,116	Inter prediction	5	3.38, 3.85, 3.98, 3.127, 7.4.5, 8.4.2, Tables 7-13, 7-17
JP	4,260,786	Inter prediction	2	0.6.1, 3.124, 7.4.3.3, 7.4.5.1, 8.4, 8.4.1.3, 8.4.2, 8.4.2.1, Tables 7-8, 7-9
JP	4,326,758	Inter prediction	1	0.6.3, 3.114, 6.4.2, 7.3.5.1, 7.4.5, 7.4.5.1, 8.4, 8.4.1, 8.4.2, 8.4.2.3.1, Fig. 6-9, Table 7-13, 7-14
JP	4,441,182	Inter prediction	2	3.124, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8.2.4.1, 8.2.4.2.1, 8.2.5.3, 8.2.5.4, 8.2.5.4.3, Table 7-14
JP	4,571,173	Inter prediction	1	3.124, 6.4.2, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8.2.4.1, 8.2.4.2.1, 8.2.5.4, 8.2.5.4.3 and 8.2.5.4.6 and Table 7-9
JP	3,734,492	Intra prediction	3	6.4.8.3, 8.3.1.1, 8.3.1.2.1, 8.3.1.2.2, 8.3.1.2.3, Table 8-2
JP	3,734,494	Intra prediction	3	6.4.8.3, 8.3.1.1, 8.3.1.2.4, 8.3.1.2.5, 8.3.1.2.6, 8.3.1.2.7, Fig. 8-1, Table 8-2
JP	3,735,244	Intra prediction	1	3.136, 6.4.3, 8.3.1.1, 8.3.1.2, 8.3.1.2.4, Fig. 6-10, Table 8.2
JP	4,357,427	Intra prediction	2	3.1.5, 6.4.10.4, 7.3.5.1, 8.3, 8.3.1.1, 8.3.1.2.1, 8.3.1.2.2, 8.3.1.2.3, Table 8-2
JP	4,357,543	Intra prediction	1	6.4.10.4, 8.3, 8.3.1.1, 8.3.1.2.4, 8.3.1.2.5, 8.3.1.2.6, 8.3.1.2.7, Fig. 8-1, Table 8-2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,357,590	Intra prediction	1	3.1.5, 6.4.10.4, 7.3.5.1, 8.3, 8.3.1.1, 8.3.1.2.1, 8.3.1.2.2, 8.3.1.2.3, Table 8-2
JP	4,133,346	Intra prediction modes	1	3.65, 3.68, 3.77, 6.4.8, 7.3.2.2, 7.4.2.2, 8.3.1, 8.3.3, Fig. 6-12
JP	3,060,376	Macroblock layer syntax	4	7.3.5, 7.4.5, 8.5, 8.5.11, 9.3.2.7, 9.3.3 and Table 9-3
JP	2,665,127	Motion compensated prediction	9	7.3.5.1, 7.3.5.3, 7.4.5.1, 8.3.2.3, 8.4.2, 8.4.2.1, 8.4.2.2, 8.5.1, 8.5.2, 8.5.3
JP	3,579,013	Motion vector prediction	4	6.4.1, 6.4.2, 8.4, 8.4.1.3.1, 8.4.1.3.2, Fig. 6-9
JP	4,114,859	Motion vector prediction	1	3.85, 6.4.8, 8.4.1, 8.4.1.1, 8.4.1.2, 8.4.1.3, 8.4.1.3.1, Fig. 6-14
JP	4,130,783	Motion vector prediction	1	6.4.8, 7.3.5.1, 7.3.5.2, 8.2.1.3, 8.4.1, 8.4.1.3, 8.4.1.3.1
JP	4,150,742	Motion vector prediction	1	3.85, 6.4.8, 8.4.1, 8.4.1.1, 8.4.1.2, 8.4.1.3, 8.4.1.3.1, Fig. 6-14
JP	4,406,239	Motion vector prediction	1	3.75, 3.85, 3.102, 3.145, 6.4.10, 7.3.2.1.1, 7.3.3, 7.4.5, 7.4.5.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.2, 8.4.1.3, 8.4.1.3.1, Tables 7-13, 7-14, 7-17
JP	4,456,087	Motion vector prediction	1	6.4.8, 7.3.5.1, 8.4.1, 8.4.1.3.1 and Figure 6-12
JP	3,631,488	NAL unit syntax	1	3.2.1, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,954	NAL unit syntax	1	3.21, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,955	NAL unit syntax	1	3.21, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,956	NAL unit syntax	1	3.21, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,957	NAL unit syntax	1	3.21, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,965	NAL unit syntax	1	3.1, 3.21, 3.87, 3.114, 3.143, 7.3.1, 7.4.1, B, B.1.1, B.1.2
JP	3,657,967	NAL unit syntax	2	3.2.1, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,968	NAL unit syntax	2	3.21, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,969	NAL unit syntax	2	3.21, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,970	NAL unit syntax	2	3.21, 3.87, 3.114, 3.115, 3.143, 3.144, 7.3.1, 7.3.2.11, 7.4.1, B, B.1.1
JP	3,657,978	NAL unit syntax	2	3.1, 3.21, 3.87, 3.114, 3.143, 7.3.1, 7.4.1, B, B.1.1, B.1.2
JP	4,448,334	NAL unit syntax	1	3.47, 3.145, 7.3.1, 7.4.1, 7.4.1.1, 7.4.1.2.3, Annex B.1.1, B.1.2, B.3
JP	3,191,935*	Picture cropping	10	6.2, 7.4.2, 7.4.2.1, C.2.2
JP	3,303,869*	Picture cropping	11	6.2, 7.4.2, 7.4.2.1, C.2.2
JP	1,869,940*	Picture prediction and coded block pattern	1	0.6.1, 6.4, 7.4.5, 9.3.2.6, Table 7-15
JP	4,503,294	Recovery point SEI message syntax	1	3.114, 3.118, Annex D.1.7, D.2.7

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	2,962,012	Redundant picture syntax	2	3.50, 3.51, 3.55, 3.56, 3.111, 3.119, 7.3.2.2, 7.3.3, 7.4.2.2, 7.4.3
JP	4,142,929	Reference picture marking	1	3.63, 3.64, 3.68, 3.100, 3.102, 3.121, 7.3.1, 7.4.1, 8.2.1.3, 8.2.5, C.4.4, Table 7-1
JP	4,215,197	Reference picture marking syntax	1	3.40, 3.123, 3.125, 3.138, 7.3.3, 7.3.3.3, 7.4.3.3, 7.4.5.1, Annex D.1.8, D.2.8, Table 7-9
JP	4,355,156	Reference picture marking syntax	1	3.14, 3.37, 3.39, 3.40, 3.123, 7.3.3, 7.3.3.3, 7.4.3, 7.4.3.3, Annex C.2, C2.3 and Table 7-9
JP	3,347,954	Reference picture selection	2	0.6.3, 3.112, 6.4.2, 7.3.5.1, 7.4.5.1, 8.4, 8.4.1, 8.4.2
JP	4,567,551	Reference picture selection	1	7.3.3, 7.3.4, 7.4.3, 7.4.4, 8.2.4.2.3, 8.4.2.1
JP	4,567,669	Reference picture selection	1	7.3.3, 7.3.4, 7.4.3, 7.4.4, 8.2.4, 8.2.4.2.3, 8.2.4.3 and 8.4.2.1
JP	3,678,365	Scaling	2	8.5.7, 8.5.8
JP	3,862,725	Scaling	2	8.5.7, 8.5.10
JP	3,702,178	Scaling and transformation	2	7.3.2.1, 7.3.2.1.1, 7.4.2.1, 8.4, 8.5.10
JP	3,964,765	Scaling and transformation	1	7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.5, 8.5.10
JP	3,964,925	Scaling and transformation	1	7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.5, 8.5.7, 8.5.10
JP	4,030,558	Scaling and transformation	3	8.5.7, 8.5.10
JP	4,067,558	Scaling and transformation	3	8.5.7, 8.5.10
JP	4,560,028	Scaling and transformation	1	7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.10, 8.5.11, 8.5.11.1
JP	4,560,033	Scaling and transformation	1	7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.10, 8.5.11
JP	3,234,807	Scaling matrix	1	3.71, 3.111, 3.128, 7.3.2.1.1, 7.3.2.2, 7.3.3, 7.3.5, 7.3.5.3.1, 7.4.2.1.1, 7.4.3, 7.4.5, 8.5.5, 8.5.7, 8.5.10, 9.2.4, Fig. 8-8
JP	3,369,422	Scanning pattern	1	3.47, 3.70, 3.118, 3.144, 3.145, 6.4.2, 7.3.4, 7.4.2.1, 7.4.4, 8.5.4, 9.2.1.9.2.2, 9.2.3, 9.2.4, Fig. 8-8
JP	3,442,028	Scanning pattern	1	3.47, 3.70, 3.118, 3.144, 3.145, 6.4.2, 7.3.4, 7.4.2.1, 7.4.4, 8.5.4, 9.2.1.9.2.2, 9.2.3, 9.2.4, Fig. 8-8
JP	4,610,195	Skipped Macroblock	1	3.100, 3.137, 7.2, 7.3.4, 7.4.2.2, 7.4.4, 8.4, 8.4.1.1, 9.1, 9.3
JP	2,794,899	Slice format	1	3.53, 3.59, 3.98, 3.102, 3.136, 3.140, 7.4.3
JP	4,125,739	Slice format	1	3.136, 7.2, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.2, 7.4.2.2
JP	3,280,999	Timing Codes	1	3.1, 3.14, 3.87, 7.3.1, 7.3.2.3, D, D.1.2, D.2.2
JP	3,679,083	Transform decoding luma blocks	2	7.4.5.3.1, 8.5.1, 8.5.3
JP	2,791,822*	Variable length coding	1	3.21, 3.68, 8.5.2, 8.5.3, 8.5.4, 8.5.6, 8.5.7, 8.5.8
JP	4,199,973	Video usability symantics	1	C, C.3, C.4, E, E.2.2, Fig. C-2
JP	2,951,861*	VLC selection	3	7.4.5, 9.1.2, Tables 9-2, 9-4

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,015,934	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,102,841	Weighted sample prediction	2	3.4, 3.8, 3.72, 7.3.2.2, 7.3.3, 7.3.3.2, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.3, 7.4.3.2, 7.4.5.1, 7.4.5.2, 8.2.4.2.1, 8.2.4.2.2, 8.4.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, Table 7-13
JP	4,127,713	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,127,714	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,127,715	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,127,716	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,127,717	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,127,718	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,159,400	Weighted sample prediction	2	3.72, 7.3.2.2, 7.3.3, 7.3.3.2, 7.4.2.2, 7.4.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,178,088	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,208,913	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,208,945	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,208,946	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,208,947	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5.1, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,208,952	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,208,953	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,208,954	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,208,955	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,213,766	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,227,162	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,227,163	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,227,164	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,227,165	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,227,166	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,227,167	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,227,168	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,227,188	Weighted sample prediction	1	7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.8 to 8.5.12
JP	4,234,780	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,234,781	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,234,782	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,234,783	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,234,784	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,247,304	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,247,305	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,247,306	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,256,455	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,256,456	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,256,457	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,256,458	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,256,459	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,256,460	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,256,461	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,256,462	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,256,465	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,282,752	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,282,753	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,282,754	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,282,755	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,282,756	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,282,757	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,282,758	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,307,522	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2
JP	4,307,523	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2
JP	4,307,524	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2
JP	4,307,525	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2
JP	4,307,526	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,527	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,528	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,529	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,530	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,307,531	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,532	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,534	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,535	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,536	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,537	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,307,538	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,307,539	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,309,469	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,320,366	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,320,367	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,320,368	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2
JP	4,320,369	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,320,370	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.8
JP	4,320,371	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2
JP	4,331,259	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,338,771	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,338,772	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,338,773	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,338,774	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,338,775	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,338,776	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,338,777	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,338,778	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,755	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,756	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,355,757	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,758	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,759	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,760	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,355,761	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,762	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,763	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,355,764	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,765	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,766	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,355,767	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,768	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,769	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,355,770	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,355,771	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,376,301	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,376,302	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,376,303	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,376,304	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,376,305	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.3.5.3, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.3, 8.5.8 to 8.5.12
JP	4,376,306	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,376,307	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.5.1 to 8.5.12
JP	4,376,308	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.12
JP	4,376,309	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,376,310	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.12
JP	4,376,311	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.12
JP	4,376,312	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,376,313	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.12
JP	4,376,314	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 to 8.5.12
JP	4,376,315	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,405,584	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,406,047	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,048	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,049	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,050	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,051	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,052	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,053	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,054	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,055	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,056	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,057	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,058	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,059	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,060	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,061	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,062	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,063	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,064	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,065	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,066	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,067	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,068	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,069	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,406,070	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,071	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,072	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,073	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,074	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,075	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,076	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,077	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,078	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,079	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,080	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,081	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,082	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,083	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,084	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,085	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,086	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,087	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,406,088	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,406,089	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,608	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,609	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,427,610	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,427,611	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,427,612	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,613	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,614	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,427,615	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,616	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,617	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,427,618	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,619	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,427,620	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,621	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,427,622	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,623	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,624	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,427,625	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,626	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,427,627	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,438,897	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,438,898	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,438,899	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,438,900	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,438,901	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,438,902	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,438,903	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,438,904	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,630	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,631	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,460,632	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,633	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,634	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,460,635	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,636	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,637	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,460,638	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,639	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,460,640	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,460,641	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,733	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,734	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,478,735	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,736	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,737	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,478,738	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,739	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,740	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,478,741	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,478,742	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,743	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,744	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,478,745	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,746	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,747	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,478,748	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,749	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,750	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,478,751	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,478,752	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,481,612	Weighted sample prediction	1	3.14, 3.77, 3.78, 3.104, 3.120, 3.121, 7.3.3, 7.3.3.2, 7.3.4, 7.4.2.1.1, 7.4.3, 7.4.3.2, 7.4.4, 8.4, 8.4.3, 8.5, 8.5.1
JP	4,496,300	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,496,301	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,302	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,496,303	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,304	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,305	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,496,306	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,307	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,308	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,496,309	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,310	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,496,311	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,496,312	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,313	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,496,314	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,496,315	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,011	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,012	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,013	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,014	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,015	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,016	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,017	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,018	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,019	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,020	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,021	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,022	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,023	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,024	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,025	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,026	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,027	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,028	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,517,029	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,030	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,031	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,032	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,033	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.3, 8.5.8 - 8.5.12
JP	4,517,034	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,035	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,036	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,037	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,038	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,039	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,517,040	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,517,041	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,539	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,540	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,541	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,542	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,543	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,544	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,545	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,546	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,547	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,548	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,538,549	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,550	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,551	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,552	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,553	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,554	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,555	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,556	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,557	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,558	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,559	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,560	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,561	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,562	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,563	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,564	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,565	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,566	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,567	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,568	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,569	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,538,570	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,538,571	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
JP	4,560,136	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,560,137	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,560,138	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	4,560,139	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3
JP	4,560,140	Weighted sample prediction	1	7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1 - 8.5.12
JP	3,866,628	Inter prediction	7	3.66, 8.4, C.2, C.2.2
JP	2,938,412	Weighted sample prediction	11	8.4.2.3.2, 8.5.1
KR	174,441	Adaptive block/sub-block motion compensation	1	6.4.2, 8.4.1, C.2, Fig. 6-9
KR	114,697	Adaptive frame/field decoding	1, 40	0.6.2, 3.27, 3.41, 3.47, 3.69, 3.76, 3.153, 6.3, 7.4.4, 8.5.12, A.2.1
KR	733,795	Arithmetic Decoding	40	5.4, 9.3.1.1, 9.3.3.2, 9.3.3.2.1, Fig. 9-3, Table 9-44
KR	491,530	Bipredictive motion compensation	1	7.4.5, 7.4.5.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
KR	494,828	Bipredictive motion compensation	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	494,829	Bipredictive motion compensation	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	494,830	Bipredictive motion compensation	1	8.4.1.2.1, 8.4.1.2.3
KR	494,831	Bipredictive motion compensation	1	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	506,864	Bipredictive motion compensation	38	8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	506,865	Bipredictive motion compensation	1	8.4.1.2.1, 8.4.1.2.3
KR	507,917	Bipredictive motion compensation	1	8.2.5, 8.4.1.2.1, 8.4.1.2.3, C.4.1
KR	508,798	Bipredictive motion compensation	13	8.4.2.3, 8.4.2.3.2
KR	508,799	Bipredictive motion compensation	1	8.2.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2
KR	508,800	Bipredictive motion compensation	1	8.4.2.3, 8.4.2.3.2
KR	788,567	Chrominance motion vectors	1	6.2, 8.4.1.4, A.2.1, Tables 6-2, 8-10
KR	788,569	Chrominance motion vectors	1	6.2, 8.4.1.4, A.2.1, Tables 6-1, 8-10
KR	788,570	Chrominance motion vectors	1	6.2, 7.4.2.1.1, 8.4.1.4, A.2.1, A.2.2, A.2.3, Tables 6-1, 8-10
KR	908,955	Chrominance motion vectors	1	6.2, 7.4.2.1.1, 8.4.1.4, Annexes A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, Tables 6-1, 8-10
KR	926,845	Coding level syntax	3	3.14, 3.32, 3.40, 3.43, 7.3.2.1.1, 7.4.2.1.1, 8, A.2, A.3, A.3.1, A.3.2, Table A-1
KR	944,552	Coding level syntax	2	3.14, 3.32, 3.40, 3.129, 7.3.2.1.1, 7.4.2.1.1, 8.5, A.2, A.3, A.3.1, A.3.2, Table A-1

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(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
KR	354,799	Coding mode information	7	6.4.8.3, 7.3.5.1, 8.3.1.1, 8.3.1.2
KR	425,613	Coding mode information	1	6.4.5, 6.4.6, 6.4.8.3, 7.3.5.1, 8.3.1.18.3.1.2, Fig. 6-12, Table 8-2
KR	335,622	Context-based Adaptive Binary Arithmetic Coding	3	3.41, 3.43, 3.48, 3.49, 7.3.5.3.3, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.3, 8.5.1, 8.5.11.1, 8.5.11.2, 9.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Table 9-42
KR	701,810	Context-based Adaptive Binary Arithmetic Coding	2	7.3.3, 7.4.3, 9.3, 9.3.1.1, 9.3.3.2.1, A.2.1, A.2.3
KR	729,270	Context-based Adaptive Binary Arithmetic Coding	1	7.1, 7.2, 7.3.5.3.3, 7.4.5.3, 7.4.5.3.3, 9.3, 9.3.3
KR	740,381	Context-based Adaptive Binary Arithmetic Coding	10	7.3.1, 7.3.3, 7.4.1, 7.4.3, 9.3, 9.3.1, 9.3.1.1, 9.3.3.2.1, 9.3.3.2.1.1, A.2, Fig. 9-3, Table 7-1
KR	969,345	Context-based Adaptive Binary Arithmetic Coding	6	6.4.9, 6.4.10.7, 7.3.2.2, 7.3.4, 7.3.5.1, 7.4.2.2, 7.4.4, 7.4.5.1, 9.3, 9.3.3.1, 9.3.3.1.1.2, 9.3.3.1.1.7, 9.3.3.2, Table 9-39, Figs. 6-13, 9-1, 9-2
KR	913,633	Context-Based Adaptive Variable Length Coding	1	7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.3, 9.2.4, Table 9-10
KR	921,030	Context-Based Adaptive Variable Length Coding	1	3.48, 3.49, 7.3.5.3.1, 7.4.5.3, 7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.3, 9.2.4, Table 9-10
KR	921,031	Context-Based Adaptive Variable Length Coding	3	7.3.5.3.2, 7.4.5.3.2, 8.5.6, 8.5.7, 8.5.11.1, 8.5.12.1, 9.2, 9.2.2, 9.2.3, 9.2.4, A.2, Figs. 8-8, 8-9, Table 9-10
KR	921,034	Context-Based Adaptive Variable Length Coding	1	7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.3, Table 9-10
KR	947,399	Context-Based Adaptive Variable Length Coding	2	0.6.4, 3.15, 3.48, 3.49, 3.155, 3.161, 7.3.5.3.2, 7.4.5.3.2, 8.5.6, 8.5.11, 9.2.2, 9.2.4, Fig. 8-8
KR	954,244	Context-Based Adaptive Variable Length Coding	1	0.6.2, 3.43, 6.4.10.4, 7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
KR	956,920	Context-Based Adaptive Variable Length Coding	1	3.15, 3.48, 3.49, 6.4.10.4, 7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.1 and Table 9-5
KR	956,926	Context-Based Adaptive Variable Length Coding	1	3.15, 3.48, 3.49, 6.4.10.4, 7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.1 and Table 9-5
KR	956,927	Context-Based Adaptive Variable Length Coding	1	0.6.2, 3.43, 6.4.10.4, 7.3.5.3.2, 7.4.5.3.2, 9.2, 9.2.1 and Table 9-5
KR	359,093	Data partitioning	25	7.4.2.9, 8.2.3, 9
KR	147,549	Deblocking filtering	1	8.7, Fig. 8-10
KR	148,130	Deblocking filtering	6	7.4.3, 8.5.10, 8.5.11, 8.7, 8.7.2.2, 8.7.2.3, Tables 8-16, 8-17
KR	152,017	Deblocking filtering	14	7.3.3, 7.4.3, 8.5.10, 8.5.11, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Tables 8-16, 8-17
KR	162,196	Deblocking filtering	1	7.4.5, 8.5.10, 8.5.11, 8.7, 8.7.2.2, 8.7.2.3, 8.7.2.4, 9, 9.1, 9.2, 9.3, Table 8-16
KR	178,711	Deblocking filtering	5	8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-6
KR	205,293	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11
KR	229,783	Deblocking filtering	1	8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Fig. 8-11
KR	237,636	Deblocking filtering	1	8.7, 8.7.1, 8.7.2, 8.7.2.2

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(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
KR	251,549	Deblocking filtering	1	8.5, 8.7, 8.7.2.3, 8.7.2.4, Fig. 8-10
KR	301,013	Deblocking filtering	1	8.7, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
KR	304,660	Deblocking filtering	1	3.48, 3.49, 7.3.5.1, 7.4.5.1, 7.4.5.3, 7.4.5.3.1, 8.4, 8.4.2.1, 8.4.2.2, 8.4.2.3, 8.5.1, 8.5.13, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, Table 8-16
KR	505,319	Deblocking filtering	1	3.154, 8.7.2.1, Fig. 8-11
KR	505,320	Deblocking filtering	1	8.7, 8.7.2.1, Fig. 8-11
KR	523,551	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10
KR	525,785	Deblocking filtering	8	8.7, 8.7.2, 8.7.2.2, Fig. 8-10
KR	584549	Deblocking filtering	2	8.7, 8.5.10, 8.5.11, 8.7.2, 8.7.2.1, 8.7.2.2
KR	602,149	Deblocking filtering	5	8.7, 8.7.1, 8.7.2, 8.7.2.2, Fig. 8-11
KR	605,290	Deblocking filtering	17	8.7, 8.5.10, 8.5.11, 8.7.2, 8.7.2.1, 8.7.2.2
KR	612,785	Deblocking filtering	5	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, Fig. 8-10
KR	626,234	Deblocking filtering	1	3.154, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, Fig. 8-11
KR	626,235	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, Fig. 8-11
KR	640,937	Deblocking filtering	1	8.7, 8.7.1, 8.7.2, 8.7.2.2, Fig. 8-11
KR	656,296	Deblocking filtering	1	3.38, 3.59, 3.64, 3.67, 3.98, 3.121, 8, 8.4, 8.4.2.1, 8.4.2.2, 8.5, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, Table 8-17
KR	674,027	Deblocking filtering	1	3.154, 8.7, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-11
KR	687,845	Deblocking filtering	1	3.154, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-11, Table 8-16
KR	708,202	Deblocking filtering	1	3.154, 8.7, 8.7.2.1, 8.7.2.3
KR	721,022	Deblocking filtering	1	3.154, 8.5.7, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-16
KR	748,512	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-16
KR	751,670	Deblocking filtering	2	8.7, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-11, Table 8-17
KR	785,588	Deblocking filtering	11	7.4.5, 8.7, 8.7.2, 8.7.2.1, Tables 7-11, 7-12, 7-13, 7-14
KR	785,589	Deblocking filtering	9	3.66, 3.71, 8, 8.4, 8.4.2.1, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, Table 8-17
KR	801,385	Deblocking filtering	1	3.38, 3.121, 7.4.3, 8, 8.4.2.1, 8.5, 8.7
KR	804,902	Deblocking filtering	1	3.38, 3.46, 3.47, 3.59, 3.63, 3.64, 3.67, 3.98, 3.121, 7.4.1, 8, 8.4.2.1, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, Table 8-17
KR	850,947	Deblocking filtering	1	8.7, 8.7.1, 8.7.2, 8.7.2.2, 8.7.2.3, Fig. 8-11
KR	886,192	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.2

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(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
KR	929,078	Deblocking filtering	1	3.51, 3.52, 3.55, 3.56, 3.57, 3.77, 3.78, 3.81, 7.3.4, 7.4.4, 8.7, 8.7.1, 8.7.2, 8.7.2.3, Figure 8-11
KR	958,982	Deblocking filtering	1	3.71, 3.77, 3.82, 3.148, 3.155, 8.4, 8.5.1, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.4, Tables 7-13, 7-14, 7-17 and 7-18
KR	950,388	Decoded picture buffer	1	3.14, 3.39, 3.40, 3.43, 7.3.3, 7.3.3.3, 7.4.3, 7.4.3.3, 8, A.2, C, C.2, C.2.3, C.2.4.1, Fig. C-2, Table 7-9
KR	959,969	Decoded picture buffer	1	3.32, 3.39, 3.40, 3.43, 3.65, C, C.4, C.4.1, C.4.5, C.4.5.1, C.4.5.2 and C.4.5.3
KR	961,036	Decoded picture buffer	3	3.8, 3.14, 3.32, 3.41, 3.43, 3.65, 3.100, 8, C.4.5, C.4.5.1, C.4.5.2 and C.4.5.3
KR	961,037	Decoded picture buffer	2	3.8, 3.14, 3.32, 3.41, 3.43, 3.65, 3.100, 8, C.4.5, C.4.5.1, C.4.5.2 and C.4.5.3
KR	583,552	Decoder buffer conformance	18	3.38, 3.59, 3.62, 3.134, 7.3.2.8, 7.3.3, 7.3.3.3, 7.3.4, 7.3.5, 7.3.5.3, 7.4.2.8, 7.4.3.3, 7.4.5.3, 8, 8.5, C, C.2, C.2.3, C.2.4, C.2.4.1, C.2.4.2
KR	603175	Decoder buffer conformance	4	3.43, C, C.1.2, C.2.2, C.4, D.1.2, D.2.2, Fig. C-2
KR	239,837	Delay Parameter	1	3.14, 3.47, C, C.1, C.1.1, C.1.2, C.4, C.4.1, C.4.3, Fig. C-2
KR	945,826	Deriving chroma motion vectors	1	6.2, 7.4.2.1.1, 8, 8.4, 8.4.1.4, 8.4.2, Tables 6-1, 8-10
KR	864,790	Deriving luma motion vectors	1	5.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	864,791	Deriving luma motion vectors	1	5.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	865,034	Deriving luma motion vectors	1	8.2.1, 8.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, A.2.1, A.2.2, A.2.3
KR	883,025	Deriving luma motion vectors	1	3.106, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, A.2, A.2.1, A.2.2, A.2.3, Table 8-6
KR	890,504	Deriving luma motion vectors	1	3.106, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, A.2, A.2.1, A.2.2, A.2.3, Table 8-6
KR	890,505	Deriving luma motion vectors	1	3.106, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, A.2, A.2.1, A.2.2, A.2.3, Table 8-6
KR	890,506	Deriving luma motion vectors	1	3.74, 3.75, 3.106, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3 and table 8-6
KR	890,509	Deriving luma motion vectors	1	3.74, 3.75, 3.106, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3 and table 8-6
KR	890,510	Deriving luma motion vectors	1	3.74, 3.75, 3.106, 5.4, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	890513	Deriving luma motion vectors	1	3.74, 3.75, 3.106, 5.4, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
KR	890514	Deriving luma motion vectors	1	3.106, 8.2.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, A.2, A.2.1, A.2.2, A.2.3, Table 8-6
KR	985,240	Deriving luma motion vectors	1	3.106, 8.2.1, 8.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
KR	985,263	Deriving luma motion vectors	1	8.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
KR	985,268	Deriving luma motion vectors	1	7.3.5, 7.3.5.2, 7.4.5, 7.4.5.2, 8.2.5, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, Tables 7-14, 7-18
KR	985,340	Deriving luma motion vectors	1	8.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
KR	985,379	Deriving luma motion vectors	1	3.106, 8.2.1, 8.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
KR	907,173	Derving luma motion vectors	1	3.74, 3.75, 5.4, 8.4.1.2, 8.4.1.2.1 and 8.4.1.2.3
KR	865,039	Direct mode	1	7.3.3.3, 7.4.3.3, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.2.5, 8.2.5.1, 8.2.5.3, 8.2.5.4.6, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, Tables 7-8, 8-6
KR	901,642	Direct mode	1	7.4.3.3, 8.2.5, 8.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, C.4.1
KR	901,643	Direct mode	1	8.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2
KR	923,380	Direct mode	5	3.41, 3.104, 3.106, 7.4.5, 7.4.5.2, 8.2.1, 8.4, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, Tables 7-14, 7-18, 8-8
KR	931,750	Direct mode	7	3.40, 3.77, 3.87, 3.104, 3.147, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
KR	375,345	Entropy coding mode	1	7.4.2.2, 8, 9.1, 9.2, 9.3
KR	260,475	Field/frame prediction selection	7	3.14, 3.55, 6.2, 7.3.2.1, 7.3.2.1.1, 7.4.2.1.1, 8.2.2, 8.2.2.8, 8.4.1.2.2, 8.4.1.2.3, Fig. 6-2
KR	617,598	Fractional sample interpolation	1	6.4.2, 8.4.2.2, 8.4.2.2.1, Figs. 6-9, 8-4
KR	766,657	IDR picture	1	1, 3.49, 3.61, 3.64, 3.65, 3.66, 3.68, 3.69, 7.3.1, 7.4.1, 8.2.5, 8.2.5.1, Table 7-1
KR	796,107	IDR picture	1	1, 3.49, 3.61, 3.64, 3.65, 3.66, 3.68, 3.69, 7.3.1, 7.4.1, 8.2.5, 8.2.5.1, Table 7-1
KR	799,412	IDR picture	1	1, 3.64, 3.65, 3.66, 3.68, 3.69, 7.3.1, 7.4.1, 8, 8.2.5, 8.2.5.1, Table 7-1
KR	926,850	Inter prediction	4	3.106, 8.2.1, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, A.2, Table 8-6
KR	931,746	Inter prediction	4	6.4.10.7, 8.2.4.2.3, 8.4.1.2.2, 8.4.1.3.2, 8.4.2, 8.4.2.1, A.2
KR	944,851	Inter prediction	3	3.100, 3.129, 7.3.2.2, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.5.1, 7.4.5.2, 8.4.2, 8.5, A.2
KR	944,852	Inter prediction	3	7.3.2.2, 7.3.5.1, 7.4.2.2, 7.4.5.1, 8.4, 8.4.2, 8.5, A.2
KR	166,716	Intra prediction	7	7.4.5, 7.4.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.2, 8.5.1, 8.5.3, Tables 7-11, 8-2, 8-3
KR	685,264	Intra prediction	30	6.4.8.3, 7.3.5.1, 7.4.5.1, 8.3, 8.3.1.1, 8.3.2.1
KR	820,132	Intra prediction	3	6.4.10.4, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.4, 8.3.1.2.4, 8.3.1.2.5, 8.3.1.2.6, 8.3.1.2.7, Table 8-2, Fig. 8-1
KR	754,972	Intra prediction modes	14	6.4.10.4, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, Table 8-2
KR	813,989	Inverse scanning	4	3.49, 3.54, 3.76, 7.3.3, 7.3.4, 7.4.2.1, 7.4.2.2, 7.4.3, 7.4.4, 7.4.5.3, 8.5, 8.5.5, 8.5.6, 8.5.8, 8.5.9, 8.5.10, 8.5.11, A.2, Tables 8-13, 8-14
KR	846,778	Inverse scanning	14	7.3.4, 7.4.2.2, 7.4.4, 7.4.5.3, 8.5, 8.5.5, 8.5.6, 8.5.8, 8.5.9, 8.5.10, 8.5.11, A.2, Tables 8-13, 8-14
KR	506,866	Luma motion vector prediction	1	8.4.1.1, 8.4.1.3, 8.4.1.3.1
KR	655,546	Luma motion vector prediction	4	8.4.1.1, 8.4.1.3, 8.4.1.3.1, Fig. 8-3
KR	757,829	Luma motion vector prediction	1	8.4, 8.4.2, 8.4.2.2, 8.4.2.2.1, 8.5, 8.5.1, 8.5.3, Fig. 8-4

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
KR	757,830	Luma motion vector prediction	1	8.4, 8.4.2, 8.4.2.2, 8.4.2.2.1, 8.5, 8.5.1, 8.5.3, Fig. 8-4
KR	757,831	Luma motion vector prediction	1	8.4, 8.4.2, 8.4.2.2, 8.4.2.2.1, 8.5, 8.5.1, 8.5.3, Fig. 8-4
KR	757,832	Luma motion vector prediction	1	7.3.5.3, 7.3.5.3.1, 7.4.5.3, 7.4.3.5.1, 8.4, 8.4.2, 8.4.2.2, 8.4.2.2.1, 8.5, 8.5.1, 8.5.3, 8.5.10, 8.5.11, 9.2, Fig. 8-4
KR	313,870	Motion vector prediction	1	6.4.1, 6.4.2, 8.4, 8.4.1.3.1, 8.4.1.3.2, Fig. 6-9, Tables 7-13, 7-17
KR	923,379	Motion vector prediction	1	3.15, 3.66, 3.87, 3.104, 3.137, 6.4.10, 7.3.5.1, 7.4.5, 7.4.5.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Table 7-13, Fig. 6-14
KR	946,845	Motion vector prediction	1	0.6, 3.15, 3.66, 3.87, 3.104, 3.123, 3.137, 6.4.10, 7.3.5.1, 7.4.5, 7.4.5.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, 8.4.2, 8.5.1, 8.5.11.2, Table 7-13 and Figure 6-14
KR	946,846	Motion vector prediction	2	3.66, 3.104, 3.137, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5, 7.4.5.1, 7.4.5.2, 8.4, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, 9.1, 9.3, Table 7-13 and Figure 6-14
KR	946,848	Motion vector prediction	1	3.66, 3.87, 3.104, 3.123, 3.137, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5, 7.4.5.1, 7.4.5.2, 8.4, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, 8.4.2, 8.5.1, 8.5.11, 8.5.12, 9.1, 9.3, Table 7-13 and Figure 6-14
KR	460,970	NAL unit syntax	10	3.87, 3.114, 7.3.1, 7.4.1, 7.4.1.2, Fig. 7-1, Table 7-1
KR	685,771	NAL unit syntax	1	3.20, 3.21, 3.87, 3.114, 3.143, 3.144, 7.3.2.11, 7.3.5.3.1, 7.4.1, 7.4.2.11, B.1.1
KR	685,772	NAL unit syntax	1	3.20, 3.21, 3.87, 3.114, 3.143, 3.144, 7.3.2.11, 7.3.5.3.1, 7.4.1, 7.4.2.11, 8.5, 9.2, B.1.1. B.2
KR	148,226	Quantization parameter	3	3.111, 7.3.5, 7.4.5, 8.5.10, 9.1, 9.1.1, Table 9-3
KR	132,895	Quantizer selection	3	7.4.5, 8, 8.5.7, 8.5.8, 8.5.9, 8.5.10, Table 7-11
KR	693,669	Reference picture selection	18	8.4.2.1, A.2, A.2.1
KR	693,670	Reference picture selection	1	8.4.2.1, A.2, A.2.1
KR	693,671	Reference picture selection	1	8.4.2.1, A.2, A.2.1
KR	857,383	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	857,384	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	857,385	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2, A.2
KR	881,554	Reference picture selection	1	8.2.4, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,555	Reference picture selection	1	8.2.4, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,556	Reference picture selection	1	8.2.4, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,557	Reference picture selection	1	8.2.4, 8.2.4.2, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,558	Reference picture selection	1	8.2.4, 8.2.4.2, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
KR	881,565	Reference picture selection	1	8.2.4, 8.2.4.2, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,566	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,567	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,568	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,569	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,570	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	881,571	Reference picture selection	1	8.2.4, 8.2.4.2.3, 8.2.4.3, 8.2.4.3.1, 8.2.4.3.2, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.4.2.2
KR	917,521	Reference picture syntax	4	3.14, 3.15, 3.40, 3.43, 3.61, 3.66, 3.69, 3.75, 3.96, 3.100, 3.104, 3.123, 3.125, 6.3, 7.3.1, 7.3.5.1, 7.3.5.2, 7.4.1, 7.4.5, 7.4.5.1, 7.4.5.2, 8, 8.3, 8.4, Annex C.4.5.1, Tables 7-10, 7-13, 7-17
KR	591,653	Scaling	27	3.154, 5.1, 5.4, 8.5.7, 8.5.10
KR	584,552	Scaling and transformation	11	7.3.2.2, 7.3.5, 7.4.2.1, 7.4.2.2, 7.4.5, 8.5.7, 8.5.10, 8.5.11, 9, Tables 7-2, 7-3, 7-4, 7-11
KR	584,622	Scaling and transformation	1	7.3.2.2, 7.3.5, 7.4.2.1, 7.4.2.2, 7.4.5, 8.5.7, 8.5.10, 8.5.11, 9.2, 9.3, Tables 7-2, 7-3, 7-4, 7-11
KR	622,305	Scaling and transformation	1	6.1, 7.3.5, 7.4.2.1, 7.4.5, 8.5.7, 8.5.10, 8.5.11, 9.2, 9.3, Tables 7-2, 7-3, 7-4
KR	622,306	Scaling and transformation	1	6.1, 7.3.5, 7.4.2.1, 7.4.5, 8.5.7, 8.5.10, 8.5.11, 9.2, 9.3, Tables 7-2, 7-3, 7-4
KR	811,986	Scaling and transformation	2	3.113, 8.5.8, 8.5.11.1
KR	839,308	Scaling and transformation	1	8.5, 8.5.11.1, 8.5.11.2
KR	839,309	Scaling and transformation	1	8.5, 8.5.1, 8.5.8, 8.5.11.1, 8.5.11.2
KR	839,311	Scaling and transformation	21	8.5, 8.5.11.1, 8.5.11.2
KR	880,305	Scaling and transformation	1	3.41, 3.43, 8.5.8, 8.5.11.1, 8.5.11.2
KR	942,344	SEI message syntax	4	3.8, 3.100, 7.3.3, 7.3.3.3, 7.4.1.2.2, 7.4.1.2.3, 7.4.3.3, A.2, C.2, C.2.4.1, D.1, D.1.8, D.2.8, Figure 7-1, Table 7-9
KR	925,968	Skipped Macroblock	1	3.77, 3.100, 3.137, 7.2, 7.3.4, 7.4.4, 7.4.5, 8.4, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 9, Tables 7-10, 7-13
KR	736,503	Slice format	1	7.2, 7.3.2.8, 7.3.2.9, 7.3.3, 7.3.4, 7.3.5, 7.4.1, 8.2, A.2, Table 7-1
KR	353,851	Slice group map	11	7.3.2.2, 7.4.2.2, 8.2.4, 8.2.2.4
KR	691,307	Slice group map	20	0.6, 0.6.2, 0.6.3, 3.77, 3.83, 3.138, 3.140, 6.3, 7.3.1, 7.3.2.8, 7.4.1, 8.2.2, 8.2.2.2, 8.2.2.8, Table 7-1, Figs. 6-7, 6-8
KR	884,134	Timing SEI messages	88	3.14, 3.43, 7.4.1, 8, A.2, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, D, D.1.2, D.2.2, E.2.1, Table 7-1

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
KR	103,834	Transform selection	4	7.4.5, 8.6.2, 8.6.2.1, 8.6.2.2, 8.6.2.3, Table 7-10
KR	578,432	Weighted sample prediction	18	7.3.2.2, 7.3.3, 7.3.3.2, 7.4.2.2, 7.4.3.2, 8.4.2.3, 8.4.2.3.2
KR	612,849	Weighted sample prediction	36	0.6, 0.6.2, 3.8, 3.66, 3.69, 3.87, 3.122, 3.123, 7.4.2.1.1, 7.4.5, 8.3, 8.4.2.3, 8.4.2.3.2, 8.4.3 and tables 7-10, 7-11, 7-14
KR	619,716	Weighted sample prediction	1	3.104, 8.2.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, A.2.1
KR	748,194	Weighted sample prediction	8	3.8, 3.55, 3.77, 3.121, 3.124, 3.125, 3.126, 3.138, 7.4.5, 8.2.4.2.3, 8.4, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, table 7-14
LI	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
LI	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
LI	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
LI	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
LI	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
LI	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
LI	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
LI	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
LI	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
LI	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
LI	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
LI	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
LI	1,452,039	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
LI	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
LI	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
LI	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
LI	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LI	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
LI	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
LI	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
LI	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
LI	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
LI	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
LI	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LI	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LI	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LI	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LI	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LU	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
LU	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
LU	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LU	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
LU	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
LU	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
LU	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
LU	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LU	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LU	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LU	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
LU	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
MC	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
MC	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
MC	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
MC	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
MC	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
MC	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
MC	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
MC	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
MC	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
MC	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
MC	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
NL	1,022,332	Bipredictive motion compensation	13	8, 8.2.1, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.2.4, 8.2.4.3, 8.4, 8.4.1, 8.4.1.2.3
NL	0279053*	Block based intra/inter selection	1	0.2, 0.5, 0.6.1, 0.6.3, 0.6.4, 3.1, 3.66, 3.67, 3.121, 7.4.2.4, 7.4.3.3, 7.4.5, 8, 8.2.4.2.5, 8.3, 8.3.1, 8.3.1.2.3, 8.4, 8.4.1, A.2.1, C.2.2, Tables 7-5, 7-10
NL	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
NL	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
NL	1,765,018	Coding level syntax	1	3.43, 3.55, 3.56, 3.77, 3.104, 7.3.2.1, 7.4.2.1.1, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.2.7, A.3.1, A.3.2, C.2, C.2.4.1, C.4, C.4.5.1, C.4.5.3, Table A-1
NL	1,765,019	Coding level syntax	1	3.8, 3.14, 3.43, 3.55, 3.56, 3.77, 3.100, 3.104, 3.123, 3.133, 7.3.2.1.1, 7.4.2.1.1, Annex A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.3.1, A.3.2, Table A-1
NL	1,742,482	Context based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
NL	1,401,213	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.41, 3.153, 3.158, 4, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1, Fig. 9-1, Tables 9-12 to 9-23, 9-31, 9-35
NL	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
NL	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
NL	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
NL	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
NL	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
NL	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
NL	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
NL	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
NL	1,750,451	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.6, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
NL	1,753,246	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
NL	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
NL	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
NL	1,424,856	Context-Based Adaptive Variable Length Coding	1	3.14, 3.15, 3.41, 3.153, 3.158, 5.4, 7.3.5.3.1, 7.4.5.3, 8.5, 8.5.1, 8.5.4, 8.5.8, 8.5.10, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-6
NL	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
NL	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
NL	1,452,039	Deblocking filtering	1	0.2, 3.15, 3.77, 3.104, 3.113, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-16
NL	1,515,567	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
NL	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
NL	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
NL	0460751	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
NL	1,022,331	Direct mode	1	1, 7.4.5, 8.2.5, 8.4.1.2.1, 8.4.1.2.3, C.2, Tables 7-10, 7-14
NL	1,022,333	Direct mode	1	3.39, 3.66, 3.113, 3.114, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 7-15

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
NL	1,029,485	Direct mode	1	3.39, 3.66, 3.113, 3.114, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-5
NL	1,029,486	Direct mode	1	3.39, 3.66, 3.113, 3.114, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-5
NL	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
NL	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
NL	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
NL	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
NL	573,665	Hierarchical picture coding types	6	3.14, 3.15, 3.25, 3.26, 3.27, 3.50, 3.55, 3.77, 3.142, 6.3, 7.3.1, 7.3.2, 7.3.2.1.1, 7.3.3, 7.4.1, 7.4.2, 7.4.2.1.1
NL	0443676*	Hierarchical picture coding types	1	0.2, 3.8, 3.48, 3.53, 3.59, 3.62, 3.63, 3.64, 3.66, 3.67, 3.98, 3.102, 3.134, 7.3.3, 7.4.1, 7.4.3, A.2.1, Table 7-1
NL	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
NL	1,450,565	Inter prediction	1	3.8, 3.15, 3.27, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
NL	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
NL	1,739,973	Inter prediction	1	3.8, 3.15, 3.27, 3.64, 3.77, 3.82, 3.111, 3.125, 3.126, 3.138, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.3, 7.4.5.1, 7.4.5.2
NL	1,510,078	Intra prediction	1	3.37, 3.39, 3.75, 5.8, 6.2, 6.3, 7.2, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1 to 8.3.1.2.9, A.2, Tables 8-2, 8-3
NL	1,499,133	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
NL	1,773,067	Motion vector prediction	2	3.8, 3.41, 3.42, 3.43, 3.77, 3.87, 3.99, 3.123, 3.124, 3.147, 6.4.2, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1, Fig. 6-9, 6-14
NL	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
NL	1,496,706	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
NL	1,742,481	Reference picture selection	1	1, 3.43, 3.65, 3.66, 3.77, 3.100, 3.108, 3.122, 3.123, 3.138, 3.142, 7.3.2.2, 7.3.3, 7.3.5.1, 7.3.5.2, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4, 8.4.2, 8.5
NL	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
NL	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
NL	1,422,944	Slice header syntax	7	3.14, 3.41, 3.43, 3.142, 6.3, 7.1, 7.2, 7.3, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.4, 7.4.5, 9.1
NL	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
NL	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
NL	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
NL	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
NL	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
NL	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
PT	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
PT	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
PT	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
PT	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
PT	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
PT	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
PT	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
PT	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
PT	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
PT	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
PT	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
PT	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
PT	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
PT	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
PT	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
PT	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
PT	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
PT	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
PT	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
PT	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
PT	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
PT	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
PT	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
PT	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
RO	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
RO	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
RO	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
RO	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
RO	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
RO	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
RO	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
RO	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
RO	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
SE	248,711*	Block skipping/coded block pattern	1	1, 3.27, 3.53, 3.64, 3.69, 3.75, 3.77, 3.85, 3.98, 3.127, 3.135, 6.1, 6.3, 6.4.1, 7.3.4, 7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8.2.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.2, 8.5, Tables 7-13, 7-14
SE	1,135,934	Coded block pattern	1	3.41, 3.59, 7.2, 7.3, 7.3.5, 7.4.5, 9, 9.1, 9.1.2, A.2, Tables 7-11, 7-15, 9-2, 9-4
SE	1,853,069	Coded block pattern	1	1, 3.43, 3.77, 3.61, 3.69, 5.1, 7.3.5, 7.3.5.3.2, 7.4.3, 7.4.5, 9.2, Tables 7-6, 7-10, 7-11
SE	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
SE	1,487,113	Context-based Adaptive Binary Arithmetic Coding	1	3.15, 3.153, 7.3.3, 7.3.5.3.2, 7.4, 7.4.5, 7.4.5.3.2
SE	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
SE	1,596,608	Context-Based Adaptive Variable Length Coding	1	0.2, 3.2, 3.15, 3.36, 3.153, 7.4.2.2, 7.4.5, 7.4.5.3.1, 9.2, 9.2.1, A, Table 9-5
SE	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
SE	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
SE	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
SE	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
SE	1,965,590	Context-Based Adaptive Variable Length coding	1	3.14, 3.15, 3.43, 3.155, 3.161, 5.4, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.6, 8.5.11, 9.2, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, 9.2.4, Figs. 8-8, Table 8-13, 9-5, 9-6, 9-7, 9-8, 9-10
SE	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
SE	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
SE	1,387,585	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
SE	1,515,567	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
SE	1,742,480	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
SE	0460751	Decoding timing control	1	0.2, 3.1, 3.27, 3.41, 3.43, 3.57, 6.1, 7.4.1.2.3, D.1.2, D.2.2, E.2.1, Fig. C-2
SE	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
SE	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SE	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
SE	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
SE	1,876,831	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
SE	1,876,833	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
SE	1,876,837	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
SE	1,876,838	Direct mode	1	1, 3.8, 3.44, 3.138, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2
SE	0443676*	Hierarchical picture coding types	1	0.2, 3.8, 3.48, 3.53, 3.59, 3.62, 3.63, 3.64, 3.66, 3.67, 3.98, 3.102, 3.134, 7.3.3, 7.4.1, 7.4.3, A.2.1, Table 7-1
SE	1,359,769	Inter prediction	1	1, 3.136, 3.42, 3.8, 7.4.5, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.4.2.3.2, Fig. 9-2
SE	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
SE	1,739,972	Inter prediction	1	3.15, 3.49, 3.55, 3.56, 3.65, 3.66, 3.77, 3.100, 3.104, 3.121, 3.125, 3.138, 3.142, 7.3.3, 7.4.3, 7.4.5.1, 8.2.4, 8.2.4.1, 8.4, 8.4.1, 8.4.2, 8.6
SE	1,753,244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
SE	1,496,706	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
SE	1,459,449	Scaling and transformation	1	3.43, 3.156, 5.1, 5.4, 7.3.2.1.1, 8, 8.5, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.7
SE	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
SE	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
SE	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SE	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SE	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SE	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SE	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SI	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
SI	1,742,483	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.4
SI	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
SI	1,478,188	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
SI	1,742,479	Decoded picture buffer	1	3.14, 3.40, 3.42, 3.43, 3.65, 3.66, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, C.2.2, C.4.5.2, C.4.5.3
SI	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
SI	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SI	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
SI	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
SI	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
SI	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
SI	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
SI	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SI	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SI	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SI	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SK	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
SK	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5
SK	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
SK	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SK	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
SK	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
SK	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
SK	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
SK	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SK	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SK	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SK	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
SK	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
TR	1,467,491	Context-based Adaptive Binary Arithmetic Coding	3	3.15, 3.153, 7.3.3, 7.3.4, 7.4.5.3.2, 9.1, 9.3, 9.3.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3.2.3, Tables 9-25, 9-26
TR	1,550,219	Context-based Adaptive Binary Arithmetic Coding	9	3.9, 3.12, 3.151, 7.3.4, 7.3.5, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1, Tables 9-12 to 9-23, 9-44
TR	1,742,484	Context-Based Adaptive Variable Length Coding	1	3, 3.15, 3.128, 3.154, 3.157, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10
TR	1,744,562	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
TR	1,746,841	Context-Based Adaptive Variable Length coding	1	3.14, 3.43, 3.155, 3.161, 6.4.3, 6.4.7, 6.4.8, 6.4.10.4, 6.4.11, 6.4.11.1, 7.3.5.3.1, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8.5, 8.5.1, 8.5.4, 8.5.11, 8.5.13, 9.2, 9.2.1, Fig. 6-10, 6-12, Table 9-5
TR	2,131,593	Context-Based Adaptive Variable Length Coding	1	3.2, 3.15, 3.38, 3.155, 5.4, 6.4.7, 6.4.8, 7.4.2.2, 7.4.5, 7.4.5.3.2, 9.2, 9.2.1, Table 9-5

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
TR	200600624T4	Context-Based Adaptive Variable Length Coding	1	3.14, 3.41, 3.153, 3.158, 5.4, 6.4.5, 6.4.8, 6.4.8.1, 6.4.8.3, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5, 8.5.1, 8.5.4, 8.5.5, 8.5.10, 8.5.12, 9.2, 9.2.1, Table 9-5
TR	200502315T4	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.108, 3.136, 3.138, 8, 8.3, 8.4, 8.4.2.1, 8.7, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17.
TR	2006 06449 T4	Deblocking filtering	1	0.6, 3.12, 3.37, 3.38, 3.59, 3.63, 3.64, 3.75, 3.98, 3.121, 7.4.5, 8, 8.1, 8.7.2
TR	200808725	Decoded picture buffer	1	3.40, 3.42, 3.43, 3.89, 3.96, 3.123, 7.3.1, 7.4.1, A.3.1, C.2.2, C.4, C.4.1, C.4.4, C.4.5.1, C.4.5.2, C.4.5.3
TR	1,406,453	Direct mode	1	3.120, 3.123, 3.124, 3.42, 3.72, 7.4.5, 8.2.4.2, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 8-6
TR	1,603,344	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
TR	1,796,396	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 7.4.5, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18, 8-6
TR	1,821,547	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
TR	1,406,451	Inter prediction	1, 2	3.14, 3.38, 3.40, 3.41, 3.63, 3.94, 3.121, 4.5.1, 6.64, 7.3.1, 7.4.1, C.3, C.4.5.2
TR	1,499,133	Motion vector prediction	1	0.2, 0.6.2, 3.85, 3.104, 3.108, 7.3.5.1, 7.3.5.2, 7.4.5.1, 8.2.1, 8.2.1.1, 8.2.1.2, 8.2.1.3, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1
TR	1753244	NAL unit syntax	10	1, 3.43, 3.116, 3.117, 7.2, 7.3.1, 7.4.1, Annex B.1, B.1.1, B.1.2
TR	200800451	Picture marking syntax	1	3.14, 3.39, 3.40, 3.43, 3.104, 7.3.3, 7.3.3.3, 7.4.1.2.4, 7.4.3, 7.4.3.3, 8.2.5.2, Annex C, C.2.3, Table 7-9
TR	1,449,383	Skipped Macroblock	1	0.2, 3.27, 3.77, 3.137, 6.4.10.7, 7.4.4, 7.4.5, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Tables 7-11 to 7-14
TR	1,809,048	Direct mode	1	3.44, 7.4.5, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Tables 7-14, 7-18
TR	2,003,899	Direct mode	1	3.44, 3.74, 3.122, 3.125, 3.126, 5.4, 7.4.5, 8.2.4, 8.2.4.2, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
TR	2,003,900	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
TR	2,009,927	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
TR	2,009,928	Direct mode	1	3.44, 3.99, 3.125, 3.126, 5.7, 7.4.5, 8.2.1, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
TR	2,015,585	Direct mode	1	3.44, 3.125, 3.126, 7.4.5, 8.2.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2.1, Tables 7-14, 7-18, 8-6
US	6,900,748	Binarization	1	7.2, 7.3.4, 7.3.5, 9.3, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, Fig. 9-1, Table 9-25
US	Re. 34,965*	Biprediction	13	0.6.1, 3.8, 3.41, 3.119, 3.123, 3.124, 3.127, 6.3, 7.3.5, 7.3.5.1, 7.4.5, 8, 8.2.4, 8.2.4.2.3, 8.2.5, 8.2.5.1, 8.4, 8.4.1, 8.4.1.3, 8.4.1.4, 8.4.2, 8.4.2.3, 8.4.2.3.1, 8.4.2.3.2, 8.5, C.2, C.2.2, Table 7-14
US	Re. 35,910	Bipredictive motion compensation	7	0.6.1, 8, 8.2.4.2.3, 8.4, 8.4.2, 8.4.2.3, 8.4.2.3.1, 8.4.2.3.2, 8.5, 8.5.1, C, C.2.2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	4,796,087*	Block skipping/coded block pattern	1	0.6.2, 0.6.3, 3.75, 6.2, 6.4.2, 7.3.4, 7.3.5, 7.3.5.3, 7.4.5, 7.44, Fig. 6-9, Tables 7-13, 7-14
US	7,826,532	Chrominance motion vectors	1	3.24, 3.66, 3.76, 3.77, 3.82, 6.2, 7.4.2.1.1, 8, 8.4, 8.4.1, 8.4.1.4, and Tables 6-1, 8-10
US	6563953	Coded block pattern	17	7.1, 7.3.5.3, 7.3.5.3.1, 7.4.5, 9.1, 9.1.2, Tables 7-11, 7-13, 7-15, 9-4
US	6735345	Coded block pattern	17	7.1, 7.3.5.3.1, 7.4.5, 9.1, 9.1.2, Tables 7-11, 7-13, 7-15, 9-4
US	7,289,673	Coded block pattern	1	3.24, 3.39, 3.41, 3.53, 3.59, 3.74, 3.75, 3.98, 3.102, 3.136, 5.1, 6.3, 7.1, 7.3.3, 7.3.5, 7.3.5.3, 7.4.3, 7.4.5, 8, Fig. 6-7, Tables 7-6, 7-10, 7-11, 7-13, 7-15
US	7,664,179	Coding level syntax	1	3.14, 3.27, 3.41, 3.43, 3.55, 3.77, 3.104, 3.138, 7.3.2.1.1, 7.4.2.1.1, Annex A.3.1, A.3.2, Table A-1
US	7,715,478	Coding level syntax	1	3.14, 3.27, 3.41, 3.43, 3.55, 3.77, 3.104, 3.138, 7.3.2.1.1, 7.4.2.1.1, 8, Annex A.3.1, A.3.2, Table A-1,
US	6,608,939	Coding mode information	1	3.14, 3.15, 3.75, 6.1, 6.4.8, 6.4.8.3, 7.3.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, Fig. 8-1, Tables 6-2, 8-2
US	6,658,152	Coding mode information	1	3.14, 3.15, 3.75, 6.4.8, 6.4.8.3, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 9, 9.2, 9.3, Fig. 8-1, Tables 6-2, 8-2
US	6,681,048	Coding mode information	1	3.14, 3.15, 3.75, 6.1, 6.4.8, 6.4.8.3, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, Fig. 8-1, Tables 6-2, 8-2
US	5,128,758*	Component optimized coding	11	3.24, 3.53, 3.74, 6.2, 8.5.2, 8.5.4, 8.5.5, 8.5.8, 8.5.9, 8.5.10, 8.5.12, Figs. 6-1, 6-2
US	5,179,442*	Component optimized coding	1	0.2, 3.14, 3.24, 3.26, 3.39, 3.41, 3.53, 3.54, 3.74, 3.75, 6.2, 6.3, 8, 8.1, 8.5, 8.5.2, 8.5.4, 8.5.5, 8.5.6, 8.5.8, 8.5.9, 8.5.10, 8.5.12, Figs. 6-1, 6-7, 6-8
US	6,646,578	Context Adaptive Variable Length Coding (CAVLC)	23	3.128, 9.2.1, 9.2.2, 9.2.2.1, 9.2.3, Table 9-6
US	7,599,435	Context-based Adaptive Binary Arithmetic Coding	2	3.3, 3.4, 3.37, 3.50, 3.55, 3.77, 3.78, 3.81, 3.151, 6.3, 6.4.10, 6.4.10.1, 6.4.11.2, 7.3.4, 7.4.4, 9.3, 9.3.3.1, 9.3.3.1.1, 9.3.3.1.1.1, 9.3.3.2, Fig. 6-8, Table 6-4
US	7,684,484	Context-based Adaptive Binary Arithmetic Coding	16	3.3, 3.4, 3.15, 3.37, 3.50, 3.55, 3.77, 3.78, 3.81, 3.151, 3.155, 6.3, 6.4.10, 6.4.10.1, 6.4.11.2, 7.3.4, 7.3.5, 7.4.5, 8.5.1, 9.3, 9.3.3.1, 9.3.3.1.1, 9.3.3.1.1.4, 9.3.3.2, 9.3.3.2.1, Fig. 6-8, Tables 6-4, 9-11
US	7,684,488	Context-based Adaptive Binary Arithmetic Coding	2	3.3, 3.4, 3.37, 3.50, 3.55, 3.77, 3.78, 3.81, 3.151, 6.3, 6.4.10, 6.4.10.1, 6.4.11.2, 7.3.4, 7.3.5.1, 7.4.5.1, 9.3, 9.3.3.1, 9.3.3.1.1, 9.3.3.1.1.8, 9.3.3.2, 9.3.3.2.1; Figure 6-8; Tables 6-4, 7-16, 9-11
US	7,702,013	Context-based Adaptive Binary Arithmetic Coding	14	7.2, 7.3.4, 7.3.5, 7.3.5.3.3, 7.4.2.2, 7.4.5.3.3, 8.5.1, 8.5.6, 9, 9.3, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.3; Annex A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, G.9, G.10.1.1, G.10.1.2; Figures 8-8, 9-1, 9-2, 9-3, 9-5; Tables 9-34, 9-42
US	7,760,806	Context-based Adaptive Binary Arithmetic Coding	2	3.3, 3.4, 3.37, 3.50, 3.55, 3.77, 3.78, 3.81, 3.151, 6.3, 6.4.10, 6.4.10.1, 6.4.11.2, 7.3.4, 7.3.5, 7.4.5, 9.3, 9.3.3.1, 9.3.3.1.1, 9.3.3.1.1.3, 9.3.3.2, 9.3.3.2.1, Figs. 6-8, Tables 6-4, 7-11, 7-13, 9-11

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	6,894,628	Context-based Adaptive Binary Arithmetic Coding	4	6.4.7, 7.2, 7.3.2.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3.2, 7.4.2.2, 9.3, 9.3.1, 9.3.1.1, 9.3.3, 9.3.3.1, 9.3.3.1.1, 9.3.3.1.1.1 to 9.3.3.1.1.9, 9.3.3.1.2, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.2, Tables 9-11 to 9-34
US	6,943,710	Context-based Adaptive Binary Arithmetic Coding	33	7.2, 7.3.4, 7.3.5, 9.3, 9.3.1.1, 9.3.3.2, 9.3.3.2.1, Figs. 9-2, 9-3, Table 9-35
US	6,954,156	Context-Based Adaptive Binary Arithmetic Coding	1	3.9, 3.12, 3.15, 3.77, 3.138, 3.151, 3.159, 7.3.3, 7.4.3, 9.3, 9.3.1.1, 9.3.3, 9.3.3.1, 9.3.3.2, 9.3.3.2.1, Fig. 9-1, 9-2, 9-3, Table 9-11 to 9-23
US	7,088,271	Context-based Adaptive Binary Arithmetic Coding	1	3.9, 3.10, 3.11, 3.12, 3.149, 7.2, 7.3.4, 7.3.5, 9.3, 9.3.1.1, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3, 9.3.3.1, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.3, Figs. 9-1, 9-2, 9-3, 9-5, Table 9-25
US	7,095,344	Context-based Adaptive Binary Arithmetic Coding	1	3.136, 3.138, 6.3, 7.3.3, 7.3.4, 7.3.5, 7.4.1, 8.1, 8.2, 9.3, 9.3.1, 9.3.1.1, 9.3.3.2, Figs. 6-7, 9-1, 9-2, Tables 7-1, 9-11 to 9-24
US	7,190,289	Context-based Adaptive Binary Arithmetic Coding	71	3.138, 3.140, 6.3, 7.3.1, 7.3.3, 7.4.1, 8.1, 8.2, 9.3, 9.3.1, 9.3.1.1, 9.3.3.2, 9.3.3.2.1.1, Figs. 6-7, 9-1, 9-2, 9-3, Tables 7-1, 9-11
US	7,286,710	Context-based Adaptive Binary Arithmetic Coding	12	3.14, 3.48, 3.49, 3.50, 3.53, 4, 6.2, 6.3, 6.4.7, 7.2, 7.3.2.2, 7.3.4, 7.3.5, 7.3.5.3.2, 7.4.2.2, 7.4.4, 9.3, 9.3.1.1, 9.3.3, 9.3.3.1, 9.3.3.1.1.2, 9.3.3.1.2, 9.3.3.2, 9.3.3.2.1, Figs. 6-8, 6-13, 9-1, 9-2, 9-11, Tables 9-30, 9-32
US	7,379,608	Context-based Adaptive Binary Arithmetic Coding	12	3.14, 3.48, 3.49, 3.50, 3.51, 3.53, 3.54, 3.55, 3.75, 3.76, 3.79, 3.158, 6.2, 6.3, 7.2, 7.3.2.2, 7.3.4, 7.3.5.3.2, 7.4.4, 7.4.5.3.2, 8.5.5, 9.3, 9.3.1.1, 9.3.2, 9.3.3.1, 9.3.3.1.3, 9.3.3.2, 9.3.3.2.1, Figs. 6-8, 8-8, 9-1, 9-2, Tables 9-11, 9-25, 9-33
US	7,388,526	Context-based Adaptive Binary Arithmetic Coding	1	3.136, 3.138, 6.3, 7.3.1, 7.3.3, 7.4.1, 8.1, 8.2, 9.3, 9.3.1, 9.3.1.1, 9.3.3.2, 9.3.3.2.1.1, Figs. 6-7, 9-1, 9-2, 9-3, Tables 7-1, 9-11
US	7,408,488	Context-based Adaptive Binary Arithmetic Coding	1	3.136, 3.138, 6.3, 7.3.3, 7.4.1, 8.1, 8.2, 9.3, 9.3.1, 9.3.1.1, 9.3.3.1, 9.3.3.2, 9.3.3.2.1.1 Figs. 6-7, 9-1, 9-3, Tables 7-1, 9-11
US	7,496,143	Context-based Adaptive Binary Arithmetic Coding	5	3.15, 3.155, 3.161, 7.2, 7.3.4, 7.3.5, 7.3.5.3.3, 7.4.2.2, 7.4.5.3.3, 9.3, 9.3.2, 9.3.2.1, 9.3.2.2, 9.3.2.3, 9.3.3, 9.3.3.1, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.3, A.2.1, A.2.3, Figs. 9-1, 9-2, 9-3, 9-5, Table 9-34
US	7,518,537	Context-based Adaptive Binary Arithmetic Coding	1	3.138, 3.140, 6.3, 7.3.1, 7.3.3, 7.4.1, 8.1, 8.2, 9.3, 9.3.1, 9.3.1.1, 9.3.1.2, 9.3.3.2, 9.3.3.2.1.1, Figs. 6-7, 9-1, 9-2, 9-3, Tables 7-1, 9-11
US	7,742,528	Context-Based Adaptive Binary Arithmetic Coding	1	3.15, 3.155, 3.156, 3.161, 7.3.5.3.3, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.3, 8.5.6, 9, 9.3, 9.3.1.1, 9.3.3.1, 9.3.3.1.3, 9.3.3.2.1, 9.3.3.2.1.1; <i>Figures</i> 8-8, 9-1, 9-3; <i>Table</i> 9-42,
US	Re. 41,729	Context-based Adaptive Binary Arithmetic Coding	11	3.138, 3.140, 6.3, 7.3.1, 7.3.3, 7.4.1, 8.1, 8.2, 9.3, 9.3.1, 9.3.1.1, 9.3.3.1, 9.3.3.2, 9.3.3.2.1.1, <i>Figures</i> 6-7, 9-1, 9-3, and <i>Tables</i> 7-1, 9-11
US	6967600	Context-Based Adaptive Variable Length Coding	1	3.15, 3.75, 3.153, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.3, Table 9-10
US	6,992,605	Context-Based Adaptive Variable Length Coding	1	3.15, 3.75, 3.153, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.2, 9.2.3, 9.2.4, Table 9-10

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,088,269	Context-Based Adaptive Variable Length Coding	1	3.9, 3.12, 3.15, 3.75, 3.136, 3.149, 3.157, 7.3.3, 7.4.3, 9.3, 9.3.1.1, 9.3.3, 9.3.3.1, 9.3.3.2, 9.3.3.2.1, Figs. 9-1, 9-2, 9-3, Tables 9-11 to 9-23
US	7,095,896	Context-Based Adaptive Variable Length Coding	2	6.4.8.3, 6.4.8.4, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5.1, 9.2, 9.2.1, Table 9-5
US	7,305,035	Context-Based Adaptive Variable Length Coding	1	3.15, 3.53, 3.75, 3.153, 3.154, 8, 8.5.1, 8.5.5, 9.2, 9.2.2, 9.2.2.1, 9.2.4, Fig. 8-8, Table 9-6
US	7,305,134	Context-Based Adaptive Variable Length Coding	1	6.4.8.3, 6.4.8.4, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5.1, 9.2, 9.2.1, Table 9-5
US	7,308,143	Context-Based Adaptive Variable Length Coding	3	6.4.8.3, 6.4.8.4, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5.1, 9.2, 9.2.1, Table 9-5
US	7,308,144	Context-Based Adaptive Variable Length coding	1, 2	6.4.8.3, 6.4.8.4, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5.1, 9.2, 9.2.1, Table 9-5
US	7,308,149	Context-Based Adaptive Variable Length coding	2	6.4.8.3, 6.4.8.4, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5.1, 9.2, 9.2.1, Table 9-5
US	7,312,731	Context-Based Adaptive Variable Length coding	1	3.15, 3.75, 3.153, 7.3.5.3.1, 7.4.3, 7.4.5, 7.4.5.3.1, 8.5.1, 8.5.5, 8.5.10, 9.2, 9.2.2, 9.2.3, 9.2.4, Fig. 8-8, Table 9-10
US	7,693,340	Context-Based Adaptive Variable Length Coding	1	6.4.10.4, 6.4.10.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 9.2, 9.2.1, Table 9-5
US	7,697,770	Context-Based Adaptive Variable Length Coding	1	3.43, 3.155, 6.4.10.4, 6.4.10.5, 7.3.5.3.2, 7.4.5.3, 7.4.5.3.2, 8.5.1, 9.2, 9.2.1, Table 9-5
US	5,774,594	Context-Based Adaptive Variable Length Coding; I_PCM mode	7	3.39, 3.41, 3.43, 6.2, 7.3.2.1.1, 7.3.5, 7.3.5.3, 7.3.5.3.2, 7.4.2.1.1, 7.4.5, 8, 8.3, 8.3.5, 8.5.9, 8.5.10, 8.5.11, 8.5.12, 9.2; Tables 6-1, 7-11; and Annex A.2.2, A.3.1, A.3.2
US	7,162,091	DC Prediction modes	17	3.15, 3.27, 3.37, 3.39, 3.41, 3.53, 3.54, 3.63, 3.64, 3.66, 3.67, 3.75, 3.85, 3.98, 3.102, 3.105, 3.106, 3.108, 3.119, 3.121, 3.136, 5.4, 7.3.2.1, 7.4.2.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.3, 8.3.2, 8.3.2.1, 8.3.2.2, 8.3.2.2.4, 8.3.3, 8.3.3.3, 8.4, A.2.4, A.2.5, A.2.6, A.2.7, Tables 8-2, 8-3, 8-4
US	5367385	Deblocking filtering	1	8.7, 8.7.1, 8.7.2.1, 8.7.2.4, Figure 8-11
US	5384849	Deblocking filtering	7	3.14, 7.3.3, 7.4.3, 8.5 to 8.5.12, 8.7 to 8.7.2.4, Tables 8-16, 8-17
US	5933541	Deblocking filtering	1	0.6.3, 3.15, 3.75, 8, 8.7, 8.7.2.1, 8.7.2.2
US	6,115,503	Deblocking filtering	1	7.4.2.2, 8.7, 8.7.1, 8.7.2, 8.7.2.2, 8.7.2.4, A.2.1, A.2.2, A.2.3, A.2.4, A.2.5, A.2.6, A.2.7, Figs. 8-10, 8-11, 8-16, Table 8-16
US	7,050,504	Deblocking filtering	6	7.4.3, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Tables 8-16, 8-17
US	7120197	Deblocking filtering	1	8.4.2.1, 8.7, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
US	7,126,989	Deblocking filtering	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.59, 3.98, 3.136, 3.138, 8.4, 8.4.2.1, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Table 8-17
US	7227901	Deblocking filtering	16	7.4.3, 8.7, 8.7.1, 8.7.2, 8.7.2.2, 8.7.2.3, Fig. 8-11, Tables 8-16, 8-17
US	7,262,886	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,277,593	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11, Tables 8-16, 8-17
US	7289682	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11
US	7,352,812	Deblocking filtering	1	8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, Fig. 8-11
US	7,359,569	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Tables 8-16, 8-17
US	7391921	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11
US	7391922	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11
US	7394945	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11
US	7397965	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11, Table 8-16
US	7403667	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11
US	7437015	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11
US	7463786	Deblocking filtering	1	8.7, 8.7.1, 8.7.2, 8.7.2.2, 8.7.2.4, Figs. 8-10, 8-11, Table 8-16
US	7492959	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.3, Figs. 8-10, 8-11
US	7492960	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figs. 8-10, 8-11
US	7496239	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.4, Figs. 8-10, 8-11
US	7499598	Deblocking filtering	1	8.7, 8.7.2, 8.7.2.1, 8.7.2.3, Figs. 8-10, 8-11
US	7,561,623	Deblocking filtering	1	8, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3, Table 8-17
US	7,583,731	Deblocking filtering	1	3.14, 3.27, 3.39, 3.40, 3.61, 3.100, 3.110, 3.138, 3.140, 7.4.5, 8, 8.7, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, Fig. 8-10, Tables 7-10, 8-17
US	7,613,240	Deblocking filtering	2	1, 8, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Table 8-17, Fig. 8-11
US	7613241	Deblocking filtering	1	8, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, Fig. 8-10, 8-11
US	7620110	Deblocking filtering	1	8, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, Fig. 8-10, 8-11
US	7,630,437	Deblocking filtering	1	8, 8.5, 8.5.1, 8.5.11, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3, Table 8-17
US	7706451	Deblocking filtering	1	8, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3; Figs. 8-10, 8-11; Table 8-17
US	7711053	Deblocking filtering	1	8, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Fig. 8-10, 8-11, Table 8-17
US	7711054	Deblocking filtering	1	8, 8.7, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Fig. 8-10, 8-11, Table 8-17
US	7,782,962	Deblocking filtering	1	3.14, 3.15, 3.27, 3.43, 3.77, 7.4.3, 8, 8.7, 8.7.1, 8.7.2, 8.7.2.2; Figs. 8-10, 8-11; and Table 8-16
US	7787542	Deblocking filtering	12	1, 8, 8.4, 8.5, 8.7, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, Fig. 8-11
US	7,792,195	Deblocking filtering	1	3.14, 3.15, 3.27, 3.43, 3.77, 3.113, 7.4.2.2, 7.4.3, 7.4.5, 8, 8.7, 8.7.1, 8.7.2, 8.7.2.2; Figs. 8-10, 8-11; and Table 8-16

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	Re. 40,177**	Deblocking filtering	1	3.75, 8, 8.5, 8.7, 8.7.2.4, Fig. 8-10
US	Re. 40,178	Deblocking filtering	21	3.75, 8, 8.5, 8.7, 8.7.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Tables 8-16, 8-17
US	Re. 40,179	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-17
US	Re. 40,180	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
US	Re. 41,089	Deblocking filtering	27	3.100, 7.4.5, 8, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3, Fig. 8-11, Tables 7-11, 7-13, 8-17
US	Re. 41,385	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-16
US	Re. 41,386	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-16
US	Re. 41,400	Deblocking filtering	27	3.100, 8, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.2, 8.7.2.3, Figure 8-11, Tables 8-16, 8-17
US	Re. 41,403	Deblocking filtering	33	8, 8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
US	Re. 41,419	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
US	Re. 41,420	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-16
US	Re. 41,421	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.2, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11, Table 8-16
US	Re. 41,436	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
US	Re. 41,459	Deblocking filtering	21	8, 8.7, 8.7.1, 8.7.2.3, 8.7.2.4, Figs. 8-10, 8-11
US	Re. 41,907	Deblocking filtering	27	3.41, 3.43, 3.100, 8, 8.7.1, 8.7.2, 8.7.2.1, 8.7.2.3 and Figure 8-11
US	7,206,347	Decoded picture buffer	1	3.14, 3.27, 3.37, 3.38, 3.41, 3.104, 3.121, 7.3.1, 7.4.1, C.4.5.2, C.4.5.3.
US	7346216	Decoded picture buffer	6	3.40, 3.64, 3.89, 3.123, 7.3.3.3, 7.4.1, 7.4.3.3, 8, C.2, C.2.3
US	5,235,618*	Decoder buffer conformance	25	C.1, C.1.1, C.1.2, C.3, Fig. C-2
US	5606539	Decoding timing control	29	C, C.1.1, C.1.2, C.3, C.4, D.2.1, D.2.2, Fig. C-2
US	5608697	Decoding timing control	1	3.1, 6.1, 6.2, 7.1, C, C.3, C.4, D.2.1, D.2.2, Fig. C-2
US	5844867	Decoding timing control	29	C, C.1.1, C.1.2, C.3, C.4, D.2.1, D.2.2, Fig. C-2
US	7,639,742	Deriving chroma motion vectors	4	3.24, 3.66, 3.76, 3.77, 3.82, 6.2, 7.3.4, 7.3.5, 7.4.2.1.1, 7.4.4, 7.4.5, 8, 8.4, 8.4.1, 8.4.1.4, Tables 6-1, 8-10
US	7327788	Deriving motion vectors	1	8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3
US	7,649,944	Deriving motion vectors	1	5.7, 8.2.4, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.4.2, 8.5
US	7,233,621	Direct mode	1	3.72, 3.102, 3.104, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	7,339,991	Direct mode	1	3.14, 3.87, 3.106, 8.2.1, 8.4.1.2.3
US	7,548,584	Direct mode	1	3.8, 3.14, 3.43, 3.74, 3.87, 3.106, 3.125, 3.126, 8, 8.2.1, 8.4, 8.4.1.2.1, 8.4.1.2.3; Table 8-6;

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,551,674	Direct mode	1	3.8, 3.14, 3.43, 3.74, 3.87, 3.106, 3.125, 3.126, 8, 8.21, 8.4, 8.4.1.2.1, 8.4.1.2.3; Table 8-6
US	7,570,691	Direct mode	1	3.74, 3.104, 3.106, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	7,606,307	Direct mode	1	3.74, 3.104, 3.106, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	7,627,035	Direct mode	1	3.74, 3.104, 3.106, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	7,634,007	Direct mode	1	3.74, 3.104, 3.106, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table: 8-6
US	7,643,556	Direct mode	1	3.74, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table: 8-6
US	7,643,557	Direct mode	1	3.74, 3.104, 3.106, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	7,646,810	Direct mode	6	3.8, 3.14, 3.43, 3.44, 3.49, 3.55, 3.66, 3.100, 3.104, 3.138, 7.3.3, 7.4.3, 8, 8.4.1.2, 8.4.1.2.2, 8.4.1.2.3, 8.4.1.3, 8.4.1.3.1
US	7,664,180	Direct mode	1	3.8, 3.15, 3.43, 3.49, 3.77, 3.87, 3.99, 3.106, 3.123, 3.125, 3.126, 8, 8.2.1, 8.2.4.2.3, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	7,733,960	Direct mode	1	3.8, 3.40, 3.43, 3.77, 3.80, 3.82, 3.87, 3.104, 3.123, 3.124, 8, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, and 8.4.1.2.3; Tables 8-6, 8-8;
US	7,756,204	Direct mode	1	3.8, 3.40, 3.41, 3.43, 3.77, 3.80, 3.82, 3.87, 3.99, 3.104, 3.123, 3.124, 3.125, 3.126, 5.4, 8, 8.2.4.2.3, 8.4, 8.4.1, 8.4.1.2, 8.4.1.2.1, and 8.4.1.2.3; and Tables 8-6, 8-8
US	Re. 35,093*	Field biprediction	46	0.6.2, 3.37, 3.48, 3.127, 8, 8.4, 8.4.2, 8.4.2.1, 8.4.2.2, 8.4.2.2.1, 8.4.2.3, 8.4.2.3.1, 8.4.2.3.2, 8.5, 8.5.1
US	6,160,849	Field/frame prediction selection	1	3.37, 3.41, 3.50, 3.55, 6.2, 6.3, 7.3.4, 7.3.5.2, 7.4.2.1, 7.4.3, 7.4.4, 8, 8.4.2.1, Figs. 6-1, 6-2, 6-8
US	5,539,466	Field/frame transform selection	1	3.54, 6.2, 6.3, 7.4.3, 7.4.4, 8.4.1.2.1, 8.5, 8.5.1, 8.5.5, 8.5.12, Figs. 6-1, 6-2, 6-4, Tables 8-6, 8-7, 8-8
US	4,849,812*	Field/frame transform selection	1	0.2, 0.6.2, 3.27, 3.41, 3.47, 3.48, 3.53, 3.69, 3.75, 3.76, 3.153, 6.2, 6.3, 6.4.1, 6.4.3, 7.4.2.1, 7.4.4, 8.5.12, Figs. 6-7, 6-8
US	4,864,393*	Fractional pel chrominance motion vector derivation	1	3.85, 3.106, 3.108, 8.4, 8.4.1, 8.4.1.3, 8.4.1.4
US	6728317	Fractional sample interpolation	2	8.4.2.2, 8.4.2.2.1, Fig. 8-4
US	5,223,949	Frame ordering	5	0.6, 0.6.1, 0.6.2, 0.6.3, 8, 7.4.3, 7.4.5, 7.4.5.1, 8.3, 8.4, 8.4.1.2.3, C, C.2, C.2.2, Figs. C-2, Tables 7-10 to 7-14
US	5,699,476*	Hierarchical picture coding types	5	3.1, 3.8, 3.59, 3.62, 3.64, 3.66, 3.67, 3.98, 3.123, 3.124, 3.125, 6.1, 6.2, 6.3, 7.3.3.1, 7.4.1, 7.4.1.2.2, 7.4.1.2.3, 7.4.1.2.4, 7.4.1.2.5, 7.4.2.1, 7.4.2.4, 7.4.2.5, 7.4.3, 7.4.5, 8, 8.2.1, 8.2.1.3, 8.3, 8.4, 8.5, C, C.2, Fig. 6-7, Tables 7-1, 7-5, 7-10
US	7,593,466	HRD parameters	1	3.14, 3.28, 3.43, 3.48, 3.49, 8, Annex C, C.3, E, E.1.1, E.2.1, E.2.2, Figs. C-1, C-2
US	7,646,816	HRD parameters	1	3.14, 3.28, 3.41, 3.43, 3.49, 8, Annex C, E, E.1.1, E.2.1, E.2.2, Figs. C-1, C-2
US	6,912,584	I, P and SP slices	13	3.59, 3.98, 3.121, 3.122, 3.123, 3.136, 3.142, 6.3, 7.3.3, 7.3.5.1, 7.4.3, 7.4.5.1, 8, 8.3, 8.4.1, 8.4.2, 8.4.2.1, 8.5, 9.1, Fig. 6-7, Tables 7-6, 7-13

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,209,520	IDR picture	1	3.59, 3.64, 3.65, 3.66, 3.67, 3.68, 3.69, 3.123, 7.3.1, 7.4.1, 7.4.2.4, 7.4.3, 8.2.5.1, Tables 7-1, 7-5, 7-6
US	5,926,225	Inter prediction	17	7.3.2.1, 7.3.3, 7.3.3.3, 7.4.2.1, 7.4.3.3, 8, 8.2.5.3, 8.4, 8.4.1, 8.4.2, 8.5, 8.5.1, 8.5.3, 8.5.4, 8.5.10, 8.5.11, Tables 7-8, 7-9
US	7,292,636	Inter prediction	1	3.8, 3.14, 3.41, 3.72, 3.85, 3.104, 3.123, 3.124, 8, 8.2.1, 8.4, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	7,515,635	Inter prediction	1	3.15, 3.49, 3.65, 3.66, 3.75, 3.77, 3.100, 3.104, 3.123, 3.124, 3.125, 3.129, 3.138, 3.142, 3.147, 7.3.2.2, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.3.5.3.3, 7.4.2.2, 7.4.3, 7.4.5.1, 8.4.2.3, 8.4.2.3.1, 8.4.2.3.2, 8.5.1
US	5,103,307*	Inter prediction samples	4	3.8, 3.61, 3.66, 3.69, 3.87, 3.100, 7.3.2.4, 7.3.3, 7.3.5, 7.3.5.1, 7.3.5.3, 7.4.2.2, 7.4.2.4, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.2.1, 8.2.4.2, 8.2.4.2.3, 8.3, 8.4, 8.4.2, 8.4.2.3, 8.4.2.3.1, 8.5, 8.5.1, 8.5.3, 8.5.4, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, 8.5.12; Tables 7-5, 7-6, 7-10, 7-14
US	7,116,830	Intra prediction	12	0.6, 3.66, 3.67, 6.4.8.3, 7.3.5.1, 7.4.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1, 8.3.1.2.2, Fig. 8-1, Table 8-2
US	7,263,232	Intra prediction	1	3.15, 3.59, 3.67, 3.75, 3.127, 3.136, 8, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.2, 8.3.1.2.4, 8.5.1, 8.5.5, Figs. 8-1, 8-8, Tables 8-2, 8-13
US	7,577,305	Intra prediction	14	3.15, 3.39, 3.41, 3.43, 3.68, 3.69, 6.4.10.4, 8, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.2.1, 8.3.1.2.2, Fig. 8-1, Table 8-2
US	6,907,071	Intra prediction modes	1	3.15, 3.65, 3.68, 3.77, 6.2, 7.4.2.2, 7.4.5, 8.3.1, 8.3.1.2, 8.3.2, 8.3.2.2, 8.3.3
US	7,386,048	Intra prediction modes	10	6.4.10.4, 7.3.5.1, 7.4.5.1, 8.3, 8.3.1, 8.3.1.1, 8.3.1.2.1, 8.3.1.2.2, 8.3.1.2.3, 8.3.1.2.4, Table 8-2
US	7,181,072	Intra sample prediction	10	3.15, 3.24, 3.27, 3.39, 3.41, 3.43, 3.48, 3.49, 3.55, 3.56, 3.65, 3.66, 3.68, 3.69, 3.76, 3.77, 3.87, 3.100, 3.104, 3.107, 3.108, 3.110, 3.138,
US	7,272,182	Luma motion vector prediction	8	3.15, 3.49, 3.65, 3.66, 3.77, 3.100, 3.104, 6.4.10, 8.4.1, 8.4.1.3, 8.4.1.3.1, 9.3, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.1.7, 9.3.3.2, 9.3.3.2.1,
US	7,310,372	Luma motion vector prediction	14	3.15, 3.49, 3.65, 3.66, 3.77, 3.100, 3.104, 6.4.10, 7.3.5.1, 7.3.5.2, 7.4.5.1, 7.4.5.2, 8.4.1, 8.4.1.3, 8.4.1.3.1, 9.3, 9.3.2, 9.3.3, 9.3.3.1, 9.3.3.1.1.7, 9.3.3.2, 9.3.3.2.1, 9.3.3.2.1.1; Figs. 6-14, 9-2, 9-3; Tables 9-34, 9-39
US	7,558,321	Luma motion vector prediction	1	3.72, 3.102, 3.104, 8.2.4, 8.2.4.2.3, 8.2.4.2.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, Table 8-6
US	5,021,879*	Macroblock & subblock header	1	3.14, 3.15, 3.27, 3.41, 3.46, 3.63, 3.64, 3.66, 3.75, 3.98, 3.101, 3.102, 3.105, 3.106, 3.108, 3.121, 3.127, 3.130, 3.136, 3.145, 3.146, 6.1, 6.2, 6.3, 6.4.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.4.4, 7.4.5, 7.4.5.2, 8, 8.3, 8.4, Fig. 6-9, Tables 7-10, 7-13, 7-15, 7-17
US	5,467,086	Motion compensated prediction	19	0.6, 0.6.3, 6.3, 7.3.5, 7.3.5.1, 7.3.5.3, 7.4.5, 7.4.5.1, 8, 8.2.5, 8.3, 8.3.3.3, 8.4, 8.4.2, 8.4.2.1, 8.4.2.2, 8.5, 8.5.1, 8.5.2, 8.5.4, 8.5.10, Tables 7-11, 7-13
US	7,280,700	Motion vector prediction	9	3.8, 3.43, 3.44, 3.138, 6.4.8, 7.3.3, 7.4.3, 8, 8.4.1.2, 8.4.1.2.2, 8.4.1.3.2, Fig. 6-12
US	7,362,807	Motion vector prediction	1	3.15, 3.47, 3.75, 3.85, 3.102, 6.4.5, 6.4.8, 6.4.8.1, 7.4.5, 7.4.5.1, 8.4, 8.4.1, 8.4.1.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, 8.4.2, Fig. 6-14, Table 7-13

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,394,853	Motion vector prediction	1	3.8, 3.15, 3.29, 3.43, 3.66, 3.87, 3.123, 6.4.10, 7.3.5, 7.3.5.2, 7.4.5.1, 7.4.5.2, 8.2.1.3, 8.4.1, 8.4.1.3, 8.4.1.3.1, 8.4.1.3.2, Fig. 6-14
US	7,400,681	Motion vector prediction	1	3.74, 3.75, 3.87, 3.122, 3.123, 3.124, 3.125, 3.126, 6.4.8, 8.2.4, 8.4, 8.4.1, 8.4.1.3, 8.4.1.3.1, Fig. 6-12
US	6,909,450	NAL unit	1	3.1, 3.14, 3.89, 3.90, 3.138, 3.142, 6.2, 6.3, 7.3.2.2, 7.3.3, 7.4.1, 7.4.1.2, 7.4.1.2.3, 7.4.2.2, 7.4.3, Fig. 6-7, Table 7-1
US	7,586,924	NAL unit	1	3.1, 3.14, 3.30, 3.31, 3.89, 3.90, 3.138, 3.160, 6.2, 7.4.1, 7.4.1.2.3, 7.4.1.2.4, G.3.4, G.3.6, G.3.11, G.3.30, G.3.31, G.3.55, G.3.60, G.3.61, G.7.4.1.2.3, G.7.4.1.2.4, Fig 7-1, Table 7-1
US	7,248,740	NAL unit syntax	1	3.14, 3.21, 3.41, 3.43, 3.47, 3.48, 3.49, 3.145, 6.1, 7.3.1, 7.4.1, 8, Annex: B, B.1, B.1.1, B.1.2, B.2
US	7,505,485	NAL unit syntax	12	3.14, 3.21, 3.41, 3.43, 3.47, 3.89, 3.145, 6.1, 7.3.1, 7.4.1, 8, B, B.1.1, B.1.2, B.2
US	7,839,895	NAL unit syntax	9	3.14, 3.21, 3.41, 3.43, 3.89, 3.116, 3.117, 6.2, 7.3.1, 7.3.2.11, 7.4.1, 8, and Annex B, B.1.1, B.1.2, B.2
US	6,571,361	NAL unit syntax	19	3.14, 3.21, 3.87, 3.88, 3.114, 3.143, 3.144, 3.149, 6.2, 7.2, 7.3.1, 7.3.2.11, 7.3.5, 7.3.5.1, 7.4.1, B
US	7,321,995	NAL unit syntax	1	3.14, 3.20, 3.21, 3.89, 3.90, 3.116, 3.145, 3.146, 3.151, 6.2, 7.2, 7.3.1, 7.3.2.11, 7.3.5, 7.3.5.1, 7.4.1, 7.4.2.11, 8, B, B.1.1, B.1.2
US	7,454,669	NAL unit syntax	15	3.1, 3.14, 3.20, 3.21, 3.89, 3.90, 3.116, 3.145, 3.146, 3.151, 6.1, 6.2, 7.2, 7.3.1, 7.3.2.11, 7.3.5, 7.3.5.1, 7.4.1, 8, Annex B, B.1.1, B.1.2
US	7,464,305	NAL unit syntax	1	3.1, 3.14, 3.20, 3.21, 3.89, 3.90, 3.116, 3.145, 3.146, 3.151, 7.2, 7.3.1, 7.3.2.11, 7.3.5, 7.3.5.1, 7.3.5.3.2, 7.4.1, 6.1, 6.2, Annex B, B.1.1, B.1.2
US	7,472,317	NAL unit syntax	1	3.14, 3.20, 3.21, 3.89, 3.90, 3.116, 3.145, 3.146, 3.151, 6.2, 7.2, 7.3.1, 7.3.2.11, 7.3.5, 7.3.5.1, 7.4.1, 8, Annex B, B.1.1, B.1.2
US	7,475,298	NAL unit syntax	1	3.14, 3.21, 3.87, 3.88, 3.114, 3.143, 3.144, 3.149, 6.2, 7.2, 7.3.1, 7.3.2.11, 7.3.5, 7.3.5.1, 7.4.1, Annex B
US	7,487,410	NAL unit syntax	1	3.14, 3.20, 3.21, 3.89, 3.90, 3.116, 3.145, 3.146, 3.151, 6.2, 7.2, 7.3.1, 7.3.2.11, 7.3.5, 7.3.5.1, 7.4.1, 7.4.2.11, 8, Annex B, B.1.1, B.1.2
US	7271849	Pan scan syntax	10	3.43, 8, Annex D, D.1.3, D.2.3
US	7274407	Pan scan syntax	10	3.43, 7.4.2.1.1, 7.4.2.3.1, 8, Annex D, D.1, D.1.3, D.2.3
US	7286189	Pan scan syntax	21	3.43, 7.4.2.1.1, 8, D, D.1.3, D.2.3
US	6,741,746	Picture cropping	1	3.27, 3.50, 3.51, 3.55, 3.56, 3.76, 3.77, 3.104, 3.159, 7.3.2.1.1, 7.3.2.2, 7.3.5, 7.4.2.1.1, 7.4.2.2, 8, 9.2, Annex C, C.2, C.2.2, Fig. C-2
US	5740310	Picture data reference header information	1	3.1, 6.1, 6.2, 6.3, 7.1, 7.3.1, 7.3.3, 7.4.3, C, C.2
US	6,373,856	Picture order count	8	3.14, 3.53, 3.75, 3.102, 3.104, 3.136, 3.138, 3.140, 7.3.3, 7.4.2.1, 7.4.3
US	Re. 37,222*	Picture prediction	16	0.6.1, 7.4.5, 7.4.5.1, 8, 8.2.4, 8.3, 8.4, 8.4.1.2.3, 8.5, C.2, C.2.2, Tables 7-10, 7-11, 7-12, 7-13, 7-14
US	5510840	Picture structure flag	7	3.53, 6.2, Fig. 6-2

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	Re. 35,158*	Prediction modes for bipredictive ("B") pictures	16	0.6.1, 7.3.5, 7.3.5.1, 7.4.5, 8, 8.2.4.2.3, 8.4, 8.4.2, 8.4.2.3, 8.4.2.3.1, 8.4.2.3.2, 8.5, 8.5.1, C.2, C.2.2, Tables 7-11, 7-14
US	6,912,351	Predictive reference picture selection	12	6.3, 7.3.3, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-13
US	7,403,663	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-13
US	7,424,159	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, C, E, E.2.1, Fig. 6-7, Tables 7-6, 7-13
US	7,433,525	Predictive reference picture selection	1	6.3, 7.3.5, 7.3.5.1, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-13
US	7,440,627	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, C, E, E.2.1, Fig. 6-7, Tables 7-6, 7-13
US	7,447,367	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-13
US	7,463,776	Predictive reference picture selection	1	6.3, 7.3.5, 7.3.5.1, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-13
US	7,486,832	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, C, E, E.2.1, Fig. 6-7, Tables 7-6, 7-13
US	7,577,303	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-10, 7-11, 7-13
US	7,577,304	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Annex C, E, E.2.1, Fig. 6-7, Tables 7-6, 7-10, 7-11, 7-13
US	7,580,583	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-10, 7-11, 7-13
US	7,587,090	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.4, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-10, 7-11, 7-13
US	7,680,347	Predictive reference picture selection	1	6.3, 7.3.3, 7.3.5, 7.3.5.1, 7.4.3, 7.4.5, 7.4.5.1, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.1, 8.5, Fig. 6-7, Tables 7-6, 7-10, 7-11, 7-13
US	7149247	recovery_frame_cnt	8	0.2, 3.41, 3.47, 3.112, D, D.1, D.1.7, D.2.7.
US	5930395	Redundant picture data	1	3.109, 3.117, 7.3.3, 7.4.3
US	6353681	Redundant picture data	1	3.109, 3.117, 7.3.2.2, 7.3.3, 7.4.2.2, 7.4.3
US	6408098	Redundant picture data	1	3.109, 3.117, 7.3.2.2, 7.3.3, 7.4.2.2, 7.4.3
US	6510554	Redundant picture data	7	3.1, 3.30, 3.102, 3.109, 3.117, 7.4.1.2.2, C, Figs. 7-1, C-2
US	6621931	Redundant picture data	1	3.109, 3.117, 7.3.2.2, 7.3.3, 7.4.2.2, 7.4.3
US	7,526,026	Reference picture selection	1	3.39, 3.41, 3.43, 3.61, 3.64, 3.65, 3.66, 3.68, 3.69, 3.123, 7.3.1, 7.4.1, 7.4.2.4, 7.4.3, 8.2.5.1, Table 7-1, 7-5, 7-6
US	7,580,459	Reference picture selection	1	3.59, 3.61, 3.64, 3.65, 3.66, 3.68, 3.69, 3.123, 3.136, 7.3.1, 7.4.1, 7.4.2.4, 7.4.3, 8.2.5.1, Tables 7-1, 7-5, 7-6
US	7,634,010	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.102, 3.120, 3.121, 3.123, 3.124, 3.153, 5.1, 7.3.3, 7.3.4, 7.4.3, 7.4.4, 8, 8.2.4, 8.4.2, 8.4.2.1

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,835,442	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.4.3, 7.4.3.1, 7.4.4, 8, 8.2.4, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,443	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.3.5.1, 7.4.3, 7.4.3.1, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,444	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.3.5.1, 7.4.3, 7.4.3.1, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,445	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.3.5.1, 7.4.3, 7.4.3.1, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,446	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.3.5.1, 7.4.3, 7.4.3.1, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,447	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.3.5.1, 7.4.3, 7.4.3.1, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,448	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.4, 7.3.5.1, 7.4.3, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,449	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.3.5.1, 7.4.3, 7.4.3.1, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,835,450	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.4, 7.4.3, 7.4.4, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.4.2, and 8.4.2.1
US	7,835,451	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.3.5.1, 7.4.3, 7.4.3.1, 7.4.4, 7.4.5.1, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.3, 8.4.1, 8.4.2, and 8.4.2.1
US	7,839,934	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.4.3, 7.4.3.1, 7.4.4, 8, 8.2.4, 8.2.4.3, 8.4.2, and 8.4.2.1
US	7,839,935	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.3.1, 7.3.4, 7.4.3, 7.4.3.1, 7.4.4, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.2.4.3, 8.4.2, and 8.4.2.1
US	7,843,999	Reference picture selection	1	3.16, 3.50, 3.51, 3.55, 3.77, 3.98, 3.99, 3.102, 3.120, 3.121, 3.122, 3.123, 3.124, 3.125, 3.126, 3.153, 5.1, 7.3.3, 7.3.4, 7.4.3, 7.4.4, 8, 8.2.4, 8.2.4.2, 8.2.4.2.3, 8.4.2, and 8.4.2.1

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,106,795	Scaling	1	3.111, 3.130, 5.1, 5.4, 8, 8.5.5, 8.5.10
US	6,681,050	Scaling and transformation	1	7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 7.4.2.1.1.1, 8, 8.5, 8.5.11, 8.5.12, Tables 7-2 to 7-4
US	6,882,685	Scaling and transformation	15	3.37, 3.41, 3.154, 7.3.5, 7.3.5.3, 7.4.5, 7.4.5.3, 8, 8.5, 8.5.1, 8.5.2, 8.5.7, 8.5.8, 8.5.9, 8.5.10, 9.2, 9.3, Table 7-15
US	7,106,797	Scaling and transformation	1	3.37, 3.41, 3.154, 7.3.5, 7.3.5.3, 7.4.5.3, 8, 8.5, 8.5.1, 8.5.2, 8.5.10, Table 7-15
US	7123655	Scaling and transformation	1	3.111, 3.130, 5.1, 5.4, 8, 8.5.5, 8.5.7, 8.5.10
US	7130348	Scaling and transformation	1	3.111, 3.130, 5.1, 5.4, 8, 8.5.5, 8.5.10
US	7170942	Scaling and transformation	1	3.113, 3.132, 5.1, 5.4, 8, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2
US	7,194,136	Scaling and transformation	6	7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8, 8.4, 8.5, 8.5.11, 8.5.12, Table 7-2 to 7-4
US	7,340,102	Scaling and transformation	4	7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8, 8.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.5, 8.5.11, 8.5.12, Tables 7-2 to 7-4
US	7,411,526	Scaling and transformation	1	3.15, 3.77, 3.155, 7.3.5.3.1, 7.3.5.3.2, 7.4.3, 7.4.5, 7.4.5.3.1, 7.4.5.3.2, 8.5.1, 8.5.6, 8.5.11, 8.5.11.1, 9.2.2, 9.2.3, 9.2.4, Fig. 8-8, Table 9-10
US	7,630,435	Scaling and transformation	1	3.113, 3.132, 7.4.3, 7.4.5, 8.5.8, 8.5.12, 8.5.12.1
US	7,684,489	Scaling and transformation	7	3.43, 3.71, 6.2, 7.3.2.1.1, 7.4.2.1.1, 8, 8.5.4, 8.5.10, 8.5.10.1, 8.5.10.2, 8.5.11, 8.5.11.2; Annex A.2.6; Figures 6-3, 8-7; Table 6-1
US	7,839,928	Scaling and transformation	1	3.39, 3.43, 3.156, 7.3.5.3, 7.4.5.3, 8, 8.5, 8.5.1, 8.5.2, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 8.5.11.2, and Table 7-15
US	6,687,409	Scaling and transformation; Deriving motion vectors	1	7.3.2.1.1, 7.3.2.1.1.1, 7.4.2.1.1, 8, 8.4, 8.4.1.2, 8.4.1.2.1, 8.4.1.2.3, 8.5, 8.5.11, 8.5.12, Tables 7-2 to 7-4
US	6,445,739	Scaling matrix	1	3.111, 7.3.2.1, 7.3.2.1.1, 7.4.2.1, 7.4.2.1.1, 7.4.2.2, 7.4.3, 7.4.5, 8.5, 8.5.1, 8.5.2, 8.5.3, 8.5.4, 8.5.5, 8.5.6, 8.5.7, 8.5.10, 9.2.4, A.2.5, A.2.6, A.2.7, Figs. 8-8, 8-9, Tables 7-2, 8-13, 8-14
US	6,501,793	Scaling matrix	1	7.3.2.1, 7.3.2.1.1, 7.4.2.1, 7.4.2.1.1, 7.4.2.2, 8.5, 8.5.1, 8.5.2, 8.5.3, 8.5.4, 8.5.5, 8.5.6, 8.5.7 A.2.5, A.2.6, A.2.7, Figs. 8-8, 8-9, Tables 7-2, 8-13, 8-14
US	7,010,035	Scaling matrix	1	3.27, 3.41, 3.43, 3.48, 3.49, 3.71, 3.73, 3.104, 3.113, 3.129, 3.132, 3.155, 3.156, 7.3.2.1.1, 7.3.2.1.1.1, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.4.2.1.1, 7.4.2.1.1.1, 7.4.5.3, 7.4.5.3.1, 7.4.5.3.2, 8, 8.5.1, 8.5.6, 8.5.8, 8.5.11, 8.5.11.1, 9.2, Fig. 8-8, Tables 7-2, 7-3, 8-13
US	6,097,759	Scanning order and prediction	4	3.108, 3.127, 8, 8.2.5, 8.4.2, 8.4.2.2, 8.5.1, 8.5.5, 8.5.10, C.2, Fig. 8-8
US	5,654,706	Scanning pattern	1	3.76, 3.128, 3.157, 4, 6.4, 6.4.2, 7.3.4, 7.4.2.1, 7.4.4, 7.4.5.3.1, 8, 8.5.5, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, Figs. 6-8, 6-9, 8-8
US	6,680,975	Scanning pattern	56	3.76, 6.4, 6.4.2, 7.3.4, 7.4.2.1, 7.4.4, 8, 8.5.5, 9, 9.1, 9.2, Figs. 6-8, 6-9, 8-8
US	7,292,657	Scanning pattern	1	4, 7.3.4, 7.3.5.3, 7.4.2.1, 7.4.2.2, 7.4.4, 8, 8.5.5, 8.5.6, 9.2, 9.3, Figs. 8-8, 8-9, Tables 8-13, 8-14

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,167,591	SEI Message syntax	1	3.38, 3.63, 3.64, 3.102, 3.121, 3.122, 3.123, 7.3.3, 7.3.3.3, 7.4.3.3, 8.2.4, C.2, C.2.4.1, D.1.8, D.2.8, Table 7-9
US	7,218,787	SEI Message syntax	1	3.38, 3.63, 3.64, 3.102, 3.121, 3.122, 3.123, 7.3.3, 7.3.3.3, 7.4.3.3, 8.2.4, C.2, C.2.4.1, D.1.8, D.2.8, Table 7-9
US	7,024,097	SEI message syntax	1	3.43, 7.4.1.2.3, 8, Annex D, D.1, D.1.2, D.2.2, E, E.1.1, E.2.1, Figure 7-1
US	7,142,775	SEI message syntax	11	3.16, 3.43, 3.153, 7.4.1.2.3, 8, Annex D, D.1, D.1.2, D.2.2, E, E.1.1, E.2.1, Figure 7-1
US	7,167,633	SEI message syntax	13	3.43, 7.4.1.2.3, 8, Annex D, D.1, D.1.2, D.2.2, E, E.1.1, E.2.1, Fig. 7-1
US	7242437	SEI message syntax	19	3.43, 7.4.1.2.3, 8, D, D.1.2, D.2.2 Fig. 7-1
US	7248779	SEI message syntax	21	3.43, 7.4.1.2.3, 8, D, D.1, D.1.2, D.2.2, E, E.1.1, E.2.1, Fig. 7-1
US	7633551	SEI message syntax	8	3.43, 7.4.1.2.3, 8, Annex D, D.1, D.1.2, D.2.2, Fig. 7-1
US	7,379,607	Skipped Macroblock	4	3.41, 3.43, 3.55, 3.72, 3.77, 3.100, 3.104, 3.129, 3.137, 3.138, 7.1, 7.2, 7.3.4, 7.3.5, 7.4.2.2, 7.4.4, 7.4.5, 8, 8.4, 8.4.1.1, 8.4.1.3, 8.4.1.4, 8.4.2, Tables 7-11, 7-13
US	7,239,662	Slice group map	1, 20	0.6.3, 0.6.4, 3.77, 3.138, 3.140, 6.3, 7, 7.3.1, 7.3.2.8, 7.4.1, 8.2.2, 8.2.2.2, Figures 6-7, 6-8, Table 7-1
US	7388916	Slice group map	1	7.3.2.2, 7.4.2.2, 8.2.2, 8.2.2.4, A.2.1 to A.2.7, Table 8-1
US	7,505,518	Slice header syntax	1	3.27, 3.39, 3.40, 3.43, 7.3.3, 7.3.3.3, 7.4.3, 7.4.3.3, 8, 8.2.5.1, 8.2.5.4, 8.2.5.4.4.1, Annex C.2.3, and Table 7-9
US	7,664,182	Slice header syntax	1	3.14, 3.15, 3.41, 3.43, 3.77, 7.2, 7.3.3, 7.3.4, 7.4.3, 7.4.4, 8, Table 7-6
US	6954157	Transform selection	1	3.153, 3.75, 7.3.5.3.1, 7.4.5.3.1, 9.2, 9.2.3, Table 9-10
US	7,184,598	Transform selection	1	6.4.8.3, 6.4.8.4, 7.3.5.3.1, 7.4.5.3, 7.4.5.3.1, 8.5.1, 9.2, 9.2.1, Table 9-5
US	7,266,149	Transform selection	43	3.15, 3.53, 3.64, 3.75, 3.98, 3.127, 3.136, 7.3.2.2, 7.3.5, 7.4.2.2, 7.4.5, 8, 8.5.1, 8.5.3, 8.5.10, 8.5.11, Tables 7-11, 7-13
US	7,109,898	Variable length decoding	5	3.15, 3.43, 3.77, 3.155, 7.3.5.3.1, 7.4.3, 7.4.5, 7.4.5.3.1, 7.4.5.3.2, 8.5.1, 8.5.6, 8.5.11, 8.5.11.1, 9.2.2, 9.2.4, Fig. 8-8
US	7,283,071	Variable length decoding	1	3.15, 3.77, 3.155, 7.3.5.3.1, 7.4.3, 7.4.4, 7.4.5, 7.4.5.3.1, 7.4.5.3.2, 8.5.1, 8.5.6, 8.5.11, 8.5.11.1, 9.2.2, 9.2.4, Fig. 8-8
US	7155055	Video usability semantics	1, 9	3.24, 3.55, 3.76, 6.2, E, E.1.1, E.2, E.2.1, Table E-5
US	6,816,552	Weighted sample prediction	1	3.8, 3.13, 3.55, 3.61, 3.66, 3.100, 3.121, 3.123, 3.124, 3.125, 3.126, 5.7, 8.2.1, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3
US	7,266,150	Weighted sample prediction	1	3.8, 3.13, 3.77, 3.100, 3.122, 3.124, 3.140, 7.3.3.2, 8.2.4.2.3, 8.4, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3
US	7,492,952	Weighted sample prediction	1	3.8, 3.15, 3.49, 3.65, 3.66, 3.75, 3.77, 3.87, 3.104, 3.106, 3.123, 3.129, 3.138, 3.147, 7.3.2.2, 7.3.3, 7.3.3.1, 7.3.5, 7.3.5.1, 7.3.5.2.2, 7.3.5.3, 7.3.5.3.1, 7.3.5.3.2, 7.3.5.3.3, 7.4.2.2, 7.4.3, 7.4.3.1, 8.4, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.1, 8.4.2.3.2, 8.4.3, 8.5, 8.5.1, 8.5.2, 8.5.3, 8.5.4, Table 7-7

## AVC Patent Portfolio License Cross-Reference Chart

(The following chart shows illustrative essential claims for each patent; other claims may also be essential.)

Cty	Patent	Description	CI	Sections
US	7,542,510	Weighted sample prediction	1	3.8, 3.43, 3.66, 3.123, 8.2.1, 8.4, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5, 8.5.1, 8.5.2, 8.5.3, 8.5.4
US	7,599,437	Weighted sample prediction	1	3.8, 3.14, 3.43, 3.49, 3.66, 3.77, 3.104, 3.121, 3.123, 7.4.2.2, 7.4.5, 7.4.5.1, 7.4.5.3, 7.4.5.3.1, 8, 8.4, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5, 8.5.1, Table 7-14
US	7,609,767	Weighted sample prediction	33	3.14, 3.27, 3.41, 3.43, 3.72, 3.105, 3.138, 3.142, 7.3.2.2, 7.3.3, 7.3.3.2, 7.4.2.2, 7.4.3.2, 8, 8.4, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, Annex: A.2.1
US	7,616,691	Weighted sample prediction	1	3.8, 3.14, 3.43, 3.49, 3.66, 3.77, 3.104, 3.121, 3.123, 7.4.2.2, 7.4.5, 7.4.5.1, 7.4.5.3, 7.4.5.3.1, 8, 8.4, 8.4.1.2.3, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5, 8.5.1
US	7,649,941	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12
US	7,649,942	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12
US	7,672,375	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4
US	7,675,973	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 7.4.5.2, 7.5.3, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12
US	7,675,975	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12
US	7,680,184	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12
US	7,684,485	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12
US	7,702,018	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12
US	7,738,557	Weighted sample prediction	1	3.24, 3.66, 3.76, 7.3.3, 7.3.3.2, 7.3.4, 7.3.5, 7.3.5.1, 7.3.5.2, 7.3.5.3, 7.4.3.2, 7.4.4, 7.4.5.1, 7.4.5.2, 8, 8.4, 8.4.1, 8.4.2, 8.4.2.3, 8.4.2.3.2, 8.4.3, 8.5.1, 8.5.3, 8.5.4, 8.5.8, 8.5.10, 8.5.11, 8.5.12