

**Essential Patents Listed on October 1, 2011 Attachment 1 for ATSC Standard**  
 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	JP 3,172,425	PSIP	3	Secs.: 6, 6.1, 6.3, 6.5.2 (Pt.2)   5, 6.1, 6.5, 6.5.1, 6.5.2, 6.7, 6.7.1, 6.7.2 (Pt. 3)   6 (Pt. 4)   5 (Pt. 5) Figs.: 6.1, 6.3, 6.15 (Pt. 2)   5.1 (Pt. 3)   Pages: 8-12, 26, 27 (Pt. 2)   7-9, 14-16 (Pt. 3)   9 (Pt. 4)   8 (Pt. 5)	Secs.: 4.1, 4.1.1, 4.1.2, 4.1.3, 6.1, 6.2.2, 7.3, 7.3.2, 7.4.4, 7.5, 7.6.1.4, 8.2, 9.2.7 Figs.: 4.1, 6.1 Pages: 19-21, 33, 34, 50, 51, 55, 58, 60, 72, 96	Secs.: 5, 5.1, D.6 Fig.: 5.1 Pages: 19, 20, 22, 122	Secs.: 4, 5.1, 6.3, 7.6, A.1.2 Figs.: 4.1, 5.1, A.3, A.4 Tables: 5.1, 7.4 Pages: 17, 18, 20, 21, 26, 48, 49, 54-56	
	JP 3,008,651	VSB	5	Secs.: 5, 6, 6.1, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.3 (Pt. 2)   5 (Pt. 3) Figs.: 6.1, 6.3, 6.8, 6.14, 6.15 (Pt. 2)   5.1 (Pt. 3) Pages: 8-12, 15, 16, 26-28 (Pt. 2)   7, 8 (Pt. 3)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99, 100			
	JP 3,061,053	VSB	6, 7	Secs.: 5, 6, 6.1, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.3 (Pt. 2)   5 (Pt. 3) Figs.: 6.1, 6.3, 6.8, 6.14, 6.15 (Pt. 2)   5.1 (Pt. 3) Pages: 8-12, 15, 16, 26-28 (Pt. 2)   7, 8 (Pt. 3)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99, 100			
	KR 317,629	channel information display	1			Sec.: 6.3.1 Table: 6.4 Pages: 29-30	Secs.: 5.3, 5.3.1, 6.3.4.3 Figs.: 5.2, 5.3 Pages: 22-23, 34	
	KR 980,047	closed captioning	1			Secs.: 1, 1.1.1, 6.9, 6.9.2 Tables: 6.25a, 6.26 Pages: 9, 10, 69-72	Secs.: A.1.2 Fig.: A.4 Pages: 54, 56	
	KR 274,288	data field sync; trellis code	7	Secs.: 6.3, 6.5.2.5 (Pt. 2) Figs.: 6.3, 6.15 (Pt. 2) Pages: 10-12, 27, 29 (Pt. 2)	Sec.: 9.2 Pages: 85, 86			
	KR 264,624	data frame	4	Secs.: 6.3, 6.4.1.2, 6.4.1.3, 6.5.1, 6.5.2, 6.5.2.3 (Pt. 2) Figs.: 6.3, 6.7, 6.14, 6.15 (Pt. 2) Pages: 10-15, 26-28 (Pt. 2)	Secs.: 4.1.1, 4.1.2, 9.2, 9.2.5 Figs.: 4.1 Pages: 20, 21, 85, 92			
	KR 962,937	DCCSCT	1			Secs.: 1.1.1, 5, 6.2, 6.5, 6.8, D.9 Fig.: 5.1 Tables: 6.2, 6.11, 6.23 Pages: 9-10, 19-20, 24, 26-27, 43-44, 67-68, 127-129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 962,939	DCCSCT	1			Secs.: 1.1.1, 5, 6.2, 6.3.1, 6.5, 6.8, D.9 Fig.: 5.1 Tables: 6.2, 6.4, 6.11, 6.23 Pages: 9-10, 19-20, 24, 26-27, 30-31, 43-44, 67-68, 127-129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 962,941	DCCSCT	1			Secs.: 1.1.1, 5, 6.2, 6.6, 6.8, D.9 Figs.: 5.1, 5.2 Tables: 6.2, 6.13, 6.23 Pages: 9, 10, 19-21, 24, 26-27, 45, 46, 67, 68, 127-129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 962,938	DCCT	1			Secs.: 1.1.1, 5, 6.2, 6.3.1, 6.5, 6.7, D.9 Fig.: 5.1 Tables: 6.2, 6.4, 6.11, 6.15 Pages: 9-10, 19-20, 24, 26-27, 30-31, 43-44, 47-49, 127-129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 962,940	DCCT	1			Secs.: 1.1.1, 5, 6.2, 6.5, 6.7, D.9 Fig.: 5.1 Tables: 6.2, 6.11, 6.15 Pages: 9-10, 19-20, 24, 26-27, 43-44, 47-49, 127-129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 978,505	DCCT	1			Secs.: 1.1.1, 5, 6.2, 6.6, 6.7, D.9 Fig.: 5.1, 5.2 Tables: 6.2, 6.13, 6.15 Pages: 9-10, 19-21, 24-27, 45-46, 48-49, 127-129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	

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 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	KR 962,942	DCCT; DCCSCT	1			Secs.: 1.1.1, 5, 6.2, 6.3.1, 6.5, 6.7, 6.8, D.9 Fig.: 5.1 Tables: 6.2, 6.4, 6.11, 6.15, 6.23 Pages: 9-10, 19-20, 24, 26-27, 30-31, 43-44, 48-49, 67-68, 127-129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 962,943	DCCT; DCCSCT	1			Secs.: 1.1.1, 5, 6.2, 6.6, 6.7, 6.8, D.9 Fig.: 5.1, 5.2 Tables: 6.2, 6.13, 6.15, 6.23 Pages: 9-10, 19-21, 24-27, 45-46, 48-49, 67-68, 127, 129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 978,504	DCCT; DCCSCT	1			Secs.: 1.1.1, 5, 6.2, 6.5, 6.7, 6.8, D.9 Fig.: 5.1, 5.2 Tables: 6.2, 6.11, 6.15, 6.23 Pages: 9-10, 19-21, 24-27, 43-44, 48-49, 67-68, 127, 129	Sec.: A.1.2 Figs.: A.3, A.4 Pages: 54-56	
	KR 215,101	Decoding video/audio	10	Secs.: 6, 6.1, 6.3, 6.4.1.2, 6.4.1.3, 6.4.1.4, 6.9.3 (Pt. 2)   5 (Pt. 3) Figs.: 6.1, 6.3 (Pt. 2)   5.1 (Pt. 3) Pages: 8-19, 41 (Pt. 2)   7-9 (Pt. 3)				
	KR 820,154	directed channel change	6			Secs.: 1.1.1, 5, 6.2 Tables: 6.2, 6.3 Pages: 9, 19, 26-27	Sec.: 1 Fig.: A.4 Pages: 10, 56	
	KR 848,653	directed channel change	7			Secs.: 1.1.1, 5, 6.2 Tables: 6.2, 6.3 Pages: 9, 19, 26-27	Sec.: 1, 6.8 Fig.: A.4 Pages: 10, 39, 56	
	KR 138,289	EIT	1			Secs.: 1.1.1, 6.5 Table: 6.11 Pages: 9, 10, 41-43		
	KR 329,417	EPG	1			Secs.: 5, D.2 Pages: 20, 110	Secs.: 5.3, 7.2 Figs.: 5.2, A.4 Pages: 22, 23, 43, 56	
	KR 369,579	EPG	5			Secs.: 1.1.1, 5 Pages: 9, 19	Secs.: 5.3, A1.2 Figs.: 5.2, A.4 Pages: 17, 22, 23, 55, 56	
	KR 194,033	GCR; VSB	8	Secs.: 6.3, 6.5.2.2 (Pt. 2) Fig.: 6.15 (Pt. 2) Pages: 10, 26-27 (Pt. 2)	Secs.: 9.2.7 Pages: 96, 97			
	KR 348,249	inactive channel information	1			Secs.: 1.1.1, 6.3.1, 6.9.6 Table: 6.4 Pages: 9-10, 29, 32-34, 72		
	KR 119,736	interference rejection filter	6	Secs.: 6.3, 6.9.3 (Pt. 2) Figs.: 6.3, 6.4, 6.17 (Pt. 2) Pages: 10-12, 41 (Pt. 2)	Secs.: 8.1, 9.2, 9.2.6 Figs.: 9.1, 9.7 Pages: 72, 85, 93, 94			
	KR 156,496	mixing video and program information	1				Secs.: 5.3.1, 6.4 Figs.: 5.3, A.4 Pages: 23, 34, 35, 56	
	KR 182,004	service location descriptor	1			Secs.: 1, 6.3.1, 6.9, 6.9.5 Tables: 6.4, 6.25a, 6.29 Pages: 9, 29, 30, 69, 70, 74-76	Secs.: 4, 6.3.3, 6.3.4.2, 7.4.1 Fig.: A.4 Pages: 17, 32-34, 47, 48, 56	

**Essential Patents Listed on October 1, 2011 Attachment 1 for ATSC Standard**  
 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
KR	100,718	STT	1			Secs.: 1.1.1, 6.1 Table: 6.1 Pages: 9, 10, 22, 23, 24	Sec.: 5.1 Tables: A.3, A.4 Pages: 20, 55, 56	
KR	313,653	sync information	15	Secs.: 6, 6.3, 6.5.1, 6.9.3 (Pt. 2) Figs.: 6.3, 6.8, 6.14 (Pt. 2) Pages: 8, 10-12, 16, 26, 41 (Pt. 2)	Secs.: 7.3, 8.2, 9.2.3, Figs.: 4.1, 5.1, 6.1, 9.4, 9.5 Pages: 20, 23, 33, 50, 73, 90-92			
KR	246,792	time information display	1				Secs.: 5.3.1, 6.4, 6.6 Figs.: 5.3, A.4 Pages: 23, 34, 35, 37, 56	
KR	540,316	trellis code	8	Secs.: 6.3, 6.4.1.4 (Pt. 2) Figs.: 6.3, 6.9 (Pt. 2) Table: 6.1, 6.2 (Pt. 2) Pages: 10-12 (Pt. 2)	Secs.: 9.2, 9.2.9 Fig.: 9.11 Page: 85			
KR	134,327	trellis code: VSB	1	Secs.: 6, 6.1, 6.3, 6.4.1.4, 6.9.3 (Pt. 2) Figs.: 6.8, 6.17 (Pt. 2) Pages: 8-12, 15-16, 41 (Pt. 2)				
KR	195,177	trellis code: VSB	3	Secs.: 6.4.1.4, 6.9.1, 6.9.3 (Pt. 2) Figs.: 6.8, 6.9 (Pt. 2) Pages: 15-17, 40-41 (Pt. 2)				
KR	161,051	trellis code: VSB; Reed Solomon error correction	6	Sec.: 6.1 (Pt. 2) Fig.: 6.1 (Pt. 2) Pages: 8, 9 (Pt. 2)	Secs.: 4.1, 4.1.1, 4.1.3, 4.1.4, 5.1.3, 9.2, 9.2.1, 9.2.9, 9.2.10, 9.2.11 Figs.: 4.1, 5.1, 9.1 Pages: 19-21, 23, 85, 86, 99-102			
US	7,199,836	closed captioning	1, 8	Secs.: 6.1 (Pt. 3)   6, 6.2, 6.2.1, 6.2.2, 6.2.3, 6.2.3.1 (Pt. 4) Tables: 6.5, 6.6, 6.7 (Pt. 4) Pages: 9 (Pt. 3)   9, 11-14 (Pt. 4)	Sec.: 4.1 Fig.: 4.1 Pages: 19, 20	Secs.: 6.5, 6.9.2 Tables: 6.11, 6.26 Pages: 41, 42, 44, 71, 72	Secs.: 6.4, 6.9.3 Figs.: 6.3 Pages: 34, 36, 40, 41	
US	7,542,096	closed captioning	1	Secs.: 6, 6.2, 6.2.1, 6.2.2, 6.2.3, 6.2.3.1 (Pt. 4) Tables: 6.5-6.7 (Pt. 4) Pages: 9, 11-14 (Pt. 4)	Sec.: 4.1 Fig.: 4.1 Pages: 19, 20	Secs.: 2.1, 3.2, 6.5, 6.9, 6.9.2, 6.9.3 Tables: 6.7, 6.11, 6.25a, 6.26 Pages: 11, 13, 34, 41-44, 69-72	Secs.: 6.4, 6.9.3, A.1.2 Fig.: A.4 Pages: 34, 35, 40, 41, 54, 56	
US	7,714,933	closed captioning	7, 13	Secs.: 6, 6.2, 6.2.1, 6.2.2, 6.2.3, 6.2.3.1 (Pt. 4) Tables: 6.5-6.7 (Pt. 4) Pages: 9, 11-14 (Pt. 4)	Sec.: 4.1 Fig.: 4.1 Pages: 19, 20	Secs.: 2.1, 3.2, 6.3.1, 6.5, 6.9, 6.9.2, 6.9.3 Tables: 6.4, 6.7, 6.11, 6.25a, 6.26 Pages: 11, 13, 29, 30, 33, 34, 41-44, 69-72	Secs.: 6.4, 6.9.3, A.1.2 Figs.: A.3, A.4 Pages: 34, 35, 40, 41, 54-56	
US	7,719,615	closed captioning	6, 11	Secs.: 6, 6.2, 6.2.1, 6.2.2, 6.2.3, 6.2.3.1 (Pt. 4) Tables: 6.5-6.7 (Pt. 4) Pages: 9, 11-14 (Pt. 4)	Sec.: 4.1 Fig.: 4.1 Pages: 19, 20	Secs.: 2.1, 3.2, 6.3.1, 6.5, 6.9, 6.9.2, 6.9.3 Tables: 6.4, 6.7, 6.11, 6.25a, 6.26 Pages: 11, 13, 29, 30, 33, 34, 41-44, 69-72	Secs.: 6.4, 6.9.3, A.1.2 Figs.: A.3, A.4 Pages: 34, 35, 40, 41, 54-56	
US	6,175,718	content advisory descriptor: DCCT	9	Sec.: 5 (Pt. 3) Fig.: 5.1 (Pt. 3) Page: 8 (Pt. 3)		Secs.: 3.3, 6.5, 6.7, 6.9.3 Fig.: D5 Table: 6.11 Pages: 14, 41, 43, 44, 64, 72, 119, 120	Secs.: 6.7, 6.9, 6.9.1 Table: 6.5 Pages: 37-40	
US Re.	36,919	data de-randomizer	53	Secs.: 6.3, 6.4.1.1, 6.5.1, 6.5.2, 6.5.2.1, 6.5.2.2, 6.5.2.3 (Pt. 2) Figs.: 6.1, 6.3, 6.5, 6.14, 6.15 (Pt. 2) Pages: 9-13, 26-28 (Pt. 2)	Secs.: 9.2.3, 9.2.5, 9.2.12 Figs.: 9.5, 9.6 Pages: 90-93, 102			
US	5,598,220	data field sync	54	Secs.: 6.3, 6.5.1, 6.5.2 (Pt. 2) Figs.: 6.3, 6.14, 6.15 (Pt. 2) Pages: 10-12, 26, 27 (Pt. 2)	Secs.: 9, 9.2, 9.2.5 Figs.: 9.1, 9.6 Pages: 82, 85, 92, 93			
US	5,619,269	data field sync; equalizer	9	Secs.: 6.3, 6.5.1, 6.5.2, 6.5.2.1, 6.5.2.2 (Pt. 2) Figs.: 6.3, 6.14, 6.15 (Pt. 2) Pages: 10, 12, 26-28 (Pt. 2)	Secs.: 9, 9.2, 9.2.5, 9.2.7, 9.3 Figs.: 9.1, 9.9 Pages: 82, 85, 92, 96, 97, 103			

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 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	US 5,629,958	data field sync: trellis code	9	Secs.: 1, 6.3, 6.4.1.4, 6.5.2, 6.5.2.5 (Pt. 2) Figs.: 6.1, 6.3, 6.15 (Pt. 2) Pages: 6, 10-12, 15, 26, 27 (Pt. 2)	Secs.: 9.2, 9.2.9 Fig.: 9.11 Pages: 85, 99			
	US 5,677,911	data frame	21	Secs.: 6.3, 6.4, 6.4.1.2, 6.4.1.3, 6.5.1 (Pt. 2) Figs.: 6.3, 6.7, 6.14 (Pt. 2) Pages: 10-15, 26 (Pt. 2)	Secs.: 4.1, 4.1.1, 4.1.4, 9, 9.2, 9.2.3, 9.2.9, 9.2.10, 9.2.11 Figs.: 4.1, 9.1, 9.11, 9.14 Pages: 19-21, 82, 85, 91, 99-102			
	US 5,416,524	data segment sync	56	Secs.: 6.3, 6.5.1 (Pt. 2) Figs.: 6.3, 6.14 (Pt. 2) Pages: 10-12, 26 (Pt. 2)	Secs.: 9.2, 9.2.3, 9.2.4 Figs.: 9.1, 9.4, 9.5 Pages: 85, 90-92			
	US 5,534,938	data segment sync: data field sync	6	Secs.: 6.3, 6.5.1, 6.5.2 (Pt. 2) Figs.: 6.3, 6.14, 6.15 (Pt. 2) Pages: 10-12, 26, 27 (Pt. 2)	Secs.: 9, 9.2, 9.2.3, 9.2.5, 9.2.6, 9.2.7 Figs.: 9.1, 9.4, 9.5, 9.6, 9.8 Pages: 82, 85, 90-93, 95, 96			
	US 5,671,226	Decoding video/audio	10	Secs.: 6, 6.1, 6.3 (Pt. 2)   5, 6.5, 6.5.1, 6.7, 6.7.1, 6.7.2 (Pt. 3)   6 (Pt. 4)   5 (Pt. 5) Figs.: 6.1, 6.3 (Pt. 2)   5.1 (Pt. 3) Pages: 8-11 (Pt. 2)   7, 8, 14, 16 (Pt. 3)   9 (Pt. 4)   8 (Pt. 5)	Secs.: 4.1.4, 7.4.4, 7.6.1.5 Fig.: 4.1 Pages: 20, 21, 55, 61			
	US Re. 42,320	Decoding video/audio	51	Secs.: 5, 5.1 (Pt. 1)   6.3, 6.4.1.3 (Pt. 2)   5, 6.1, 6.1.1, 6.2, 6.2.1, 6.2.1.2, 6.7, 6.7.1, 6.8.1, 6.8.3 (Pt. 3)   6 (Pt. 4)   5, 6, 6.1, 6.2, 6.3 (Pt. 5) Figs.: 5.1 (Pt. 1)   6.3 (Pt. 2)   5.1 (Pt. 3)	Secs.: 4, 4.1, 4.1.2, 4.1.4, 5.1.3, 6.1, 6.6.1, 6.6.3, 7.4.4, 7.6.1.2, 7.6.1.5, 9.2 Figs.: 4.1, 5.1, 6.1 Pages: 18 to 21, 23, 33, 43-45, 55, 59, 61, 85			
	US 6,104,436	EPG	11		Secs.: 4, 4.1.3, 7.1 Pages: 18, 20, 21, 49	Secs.: 6.3, 6.3.1, 6.5 Table: 6.4 Pages: 28-32, 41	Secs.: 5.3, 5.3.1, 6.3, 6.3.1, 6.3.4.2, 6.3.4.3, 6.4, 5.2, 5.3, 7.4.1 Figs.: 5.2, 5.3, 6.2 Pages: 22, 23, 26-29, 33-35, 46-48	
	US 7,574,722	extended text table	1			Secs.: 3.3, 5, 6.6 Fig.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 5.3.1, 6.4, 6.4.1, 6.5 Figs.: 4.2, 5.3, A.4 Pages: 19, 23, 35-37, 56	
	US 7,594,248	extended text table	1			Secs.: 3.3, 5, 6.6 Figs.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 5.3.1, 6.4, 6.5 Figs.: 5.3, A.4 Table: 4.2 Pages: 18, 19, 23, 35-37, 56	
	US 7,743,397	extended text table	1			Secs.: 3.3, 5, 6.6 Fig.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 5.3.1, 6.4, 6.5 Figs.: 5.3, A.4 Table: 4.2 Pages: 18, 19, 23, 35-37, 56	
	US 7,752,645	extended text table	1			Secs.: 3.3, 5, 6.6 Fig.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 5.3.1, 6.4, 6.4.1, 6.5 Figs.: 4.2, 5.3, A.4 Pages: 19, 23, 35-37, 56	
	US 7,752,646	extended text table	8			Secs.: 3.3, 5, 6.6 Fig.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 5.3.1, 6.4, 6.4.1, 6.5 Figs.: 4.2, 5.3, A.4 Pages: 19, 23, 35-37, 56	
	US 7,765,572	extended text table	11			Secs.: 3.3, 5, 6.6 Fig.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 5.3.1, 6.4, 6.4.1, 6.5 Figs.: 4.2, 5.3, A.4 Pages: 19, 23, 35-37, 56	
	US 7,849,484	extended text table	1			Secs.: 3.3, 5, 6.6 Fig.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 4, 5.3.1, 6.4, 6.4.1, 6.5 Figs.: 4.2, 5.3, A.4 Pages: 17, 19, 23, 35-37, 56	
	US 7,853,976	extended text table	1			Secs.: 3.3, 5, 6.6 Fig.: 5.2 Table: 6.13 Pages: 15, 19, 21, 45, 46	Secs.: 4, 5.3.1, 6.4, 6.4.1, 6.5 Figs.: 4.2, 5.3, A.4 Pages: 17, 19, 23, 35-37, 56	

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Cty	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	US 6,184,938	GCR: VSB	17	Secs.: 6.3, 6.5.2.2 (Pt. 2) Figs.: 6.3, 6.15, 6.16 (Pt. 2) Pages: 10, 12, 27-28 (Pt. 2)	Secs.: 9.2, 9.2.3, 9.2.5, 9.2.7 Figs.: 9.1, 9.5, 9.6, 9.9 Pages: 85, 90-93, 96, 97			Secs.: B2.1, B2.2 Fig.: B.1 Pages: 36, 37
	US 6,480,239	GCR: VSB	13	Secs.: 1, 6, 6.3, 6.5.2, 6.5.2.2 (Pt. 2) Figs.: 6.3, 6.15, 6.16 (Pt. 2) Pages: 6, 8-10, 12, 26-28 (Pt. 2)				Secs.: B2.1, B2.2 Fig.: B.1 Pages: 36, 37
	US 6,937,292	GCR: VSB	7	Secs.: 6.3, 6.5.2, 6.5.2.2 (Pt. 2) Figs.: 6.1, 6.3, 6.15, 6.16 (Pt. 2) Pages: 9, 10, 12, 26-28 (Pt. 2)	Secs.: 9.2, 9.2.5, 9.2.7 Figs.: 9.1, 9.9 Pages: 85, 92, 96, 97			Secs.: B2.1, B2.2 Fig.: B.1 Pages: 36, 37
	US 7,877,769	genre descriptor	1			Secs.: 1.1.1, 6.5, 6.7.2, 6.9, 6.9.13 Tables: 6.11, 6.20, 6.25a, 6.38 Pages: 10, 41, 43, 61, 62, 69, 70, 81, 82	Sec.: 6.1 Fig.: A.4 Table: 6.1 Pages: 24, 56	
	US 7,877,770	genre descriptor	4			Secs.: 1.1.1, 6.5, 6.7.2, 6.9, 6.9.13 Tables: 6.11, 6.20, 6.25a, 6.38 Pages: 10, 41, 43, 61, 62, 69, 70, 81, 82	Sec.: 6.1 Figs.: A.3, A.4 Table: 6.1 Pages: 24, 55, 56	
	US 7,877,771	genre descriptor	4			Secs.: 1.1.1, 5, 6.5, 6.7.2, 6.9, 6.9.13 Tables: 6.11, 6.20, 6.25a, 6.38 Pages: 9, 10, 21, 41-43, 61, 62, 69, 70, 81, 82	Secs.: 6.1, 6.4 Fig.: A.3 Table: 6.1 Pages: 24, 34, 35, 55	
	US 7,877,773	genre descriptor	4			Secs.: 1.1.1, 6.3, 6.5, 6.7.2, 6.9, 6.9.13 Tables: 6.11, 6.20, 6.25a, 6.38 Pages: 10, 28, 41, 43, 61, 62, 69, 70, 81, 82	Secs.: 6.1, 6.3 Fig.: A.3 Table: 6.1 Pages: 24, 26, 55	
	US 7,917,926	genre descriptor	4			Secs.: 1.1.1, 6.5, 6.7.2, 6.9, 6.9.2, 6.9.13 Tables: 6.11, 6.20, 6.25a, 6.38 Pages: 10, 41, 43, 61, 62, 69-71, 81, 82	Sec.: 6.1 Fig.: A.3 Table: 6.1 Pages: 24, 55	
	US 5,684,541	modulation_mode & service_type	2	Secs.: 6 (Pt. 2)   5 (Pt. 3) Figs.: 6.1 (Pt. 2)   5.1 (Pt. 3) Pages: 8-9 (Pt. 2)   7-8 (Pt. 3)		Secs.: 5.1, 6.3, 6.3.1 Tables: 6.4, 6.5, 6.7 Pages: 21, 27-28	Secs.: 5, 5.1, 6.3.1, 6.3.4.2 Pages: 19-20, 28-29, 33	
	US Re. 40,241	NTSC interference rejection filter	21		Secs.: 9, 9.2, 9.2.1, 9.2.6 Figs.: 9.1, 9.2, 9.8 Table: 9.2 Pages: 82, 85-88, 93-95			
	US 5,406,587	phase tracker	1		Secs.: 9.2.2, 9.2.8 Figs.: 9.3, 9.10 Pages: 88, 97, 98			
	US 6,487,220	PSIP	1	Secs.: 5 (Pt. 3)   6.8, 6.9 (Pt. 5) Pages: 7-9 (Pt. 3)   13 (Pt. 5)	Secs.: 4.1, 4.1.2, 6.6.2, 6.6.2.7, 6.6.2.8, 6.6.4.7, 6.6.4.8 Fig.: 4.1 Table: 6.1 Pages: 19-21, 43, 44, 47	Secs.: 5, 5.1, 6.2, 6.3, 6.3.1, 6.5, 6.7, 6.7.2, 6.9, 6.9.1, 6.9.5 Fig.: 5.1 Tables: 6.2, 6.3, 6.4, 6.11, 6.15, 6.17, 6.25a, 6.29 Pages: 19, 20, 22, 24-30, 32-35, 41, 43, 44, 47, 48, 50-53, 57, 69-71, 74-76	Secs.: 6.3, 6.3.3, 6.9, A.1.2 Fig.: A.3 Table: 6.5 Pages: 26, 32, 40, 54, 55	

**Essential Patents Listed on October 1, 2011 Attachment 1 for ATSC Standard**  
 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	US 6,522,672	PSIP	1	Secs.: 5 (Pt. 3)   6.8, 6.9 (Pt. 5) Pages: 7-9 (Pt. 3)   13 (Pt. 5)	Secs.: 4.1, 4.1.2, 6.6.2, 6.6.2.7, 6.6.2.8, 6.6.4.7, 6.6.4.8 Fig.: 4.1 Table: 6.1 Pages 19-21, 43, 44, 47	Secs.: 5, 5.1, 6.2, 6.3, 6.3.1, 6.5, 6.7, 6.7.2, 6.9, 6.9.1, 6.9.5 Fig.: 5.1 Tables: 6.2, 6.3, 6.4, 6.11, 6.15, 6.17, 6.25a, 6.29 Pages: 19, 20, 22, 24-30, 32-35, 41, 43, 44, 47, 48, 50-53, 57, 69-71, 74-76	Secs.: 6.3, 6.3.3, 6.9, A.1.2 Fig.: A.3 Table: 6.5 Pages: 26, 32, 40, 54, 55	
	US 7,424,729	PSIP transmission cycles	1			Secs.: 5, 5.1, 6.5, 6.6 Table: 6.11 Pages: 19-22, 41-45	Secs.: 4, 6.1, 6.4, 6.5, 7.3 Fig.: 6.3 Table: 5.1, 5.2, 6.1 Pages: 19-22, 24, 34-37, 44	
	US 7,426,742	PSIP transmission cycles	1			Secs.: 5, 5.1, 6.5, 6.6 Table: 6.11 Pages: 19-22, 41-45	Secs.: 4, 6.1, 6.4, 6.5, 7.3 Fig.: 6.3 Table: 5.1, 5.2, 6.1 Pages: 19-22, 24, 34-37, 44	
	US 7,428,745	PSIP transmission cycles	6			Secs.: 5, 5.1, 6.5, 6.6 Table: 6.11 Pages: 19-22, 41-45	Secs.: 4, 5.1, 6.1, 6.4, 6.5, 7.3 Fig.: 6.3 Table: 5.1, 5.2, 6.1 Pages: 19-22, 24, 34-37, 44	
	US 7,757,256	PSIP transmission cycles	1, 5			Secs.: 5, 5.1, 6.5, 6.6 Table: 6.11 Pages: 19-22, 41-45	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 19-21, 24, 34-37, 44, 56	
	US 7,757,257	PSIP transmission cycles	1, 5			Secs.: 5, 5.1, 6.5, 6.6 Table: 6.11 Pages: 19-22, 41-45	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 19-21, 23, 24, 34-37, 44, 56	
	US 7,761,894	PSIP transmission cycles	1, 6			Secs.: 5, 5.1, 6.1, 6.5, 6.6, A Tables: 6.1, 6.11, 7.1 Pages: 19-24, 41-45, 86, 87	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.4, 6.4.1, 6.5, 6.6, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 18-21, 23, 24, 34-37, 44, 56	
	US 7,761,895	PSIP transmission cycles	1, 5			Secs.: 5, 5.1, 6.5, 6.6 Table: 6.11 Pages: 19-22, 41-45	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 19-21, 23, 24, 34-37, 44, 56	
	US 7,761,896	PSIP transmission cycles	1, 5			Secs.: 5, 5.1, 6.5, 6.6 Table: 6.11 Pages: 19-22, 41-45	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 19-21, 23, 24, 34-37, 44, 56	
	US 7,836,468	PSIP transmission cycles	1, 10			Secs.: 5, 5.1, 6.3, 6.3.1, 6.5, 6.6 Tables: 6.4, 6.11, 6.13, 7.1 Pages: 19-22, 28-35, 41-47, 86	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.3.1, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 18-21, 23, 24, 27, 29, 34-37, 44, 56	
	US 7,836,469	PSIP transmission cycles	1, 10			Secs.: 5, 5.1, 6.2, 6.3, 6.3.1, 6.5, 6.6 Tables: 6.2, 6.4, 6.11, 7.1 Pages: 19-22, 24-35, 41-45, 86	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.2, 6.3.1, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 18-21, 23, 24, 26, 27, 29, 34-37, 44, 56	
	US 7,950,035	PSIP transmission cycles	1, 10			Secs.: 5, 5.1, 6.2, 6.5, 6.6 Tables: 6.2, 6.11, 7.1 Pages: 19-22, 24-28, 41-45, 86	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.2, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 18-21, 23, 24, 26, 34-37, 44, 56	
	US 7,950,036	PSIP transmission cycles	1, 10			Secs.: 5, 5.1, 6.2, 6.5, 6.6 Tables: 6.2, 6.11, 6.13, 7.1 Pages: 19-22, 24-28, 41-47, 86	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.2, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 18-21, 23, 24, 26, 34-37, 44, 56	

**Essential Patents Listed on October 1, 2011 Attachment 1 for ATSC Standard**  
 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	US 7,962,939	PSIP transmission cycles	1, 10			Secs.: 5, 5.1, 6.3, 6.3.1, 6.5, 6.6 Tables: 6.4, 6.11, 7.1 Pages: 19-22, 28-35, 41-45, 86	Secs.: 4, 5, 5.1, 5.3.1, 6.1, 6.3.1, 6.4, 6.4.1, 6.5, 7.3 Figs.: 5.3, 6.3, A.4 Tables: 5.1, 5.2, 6.1, 7.1 Pages: 18-21, 23, 24, 27, 29, 34-37, 44, 56	
	US 5,488,418	Reed Solomon error correction	4	Secs.: 6, 6.1, 6.4.1.2 (Pt. 2)   5 (Pt. 3)   6, 6.1 (Pt. 4) Figs.: 6.1 (Pt. 2)   5.1 (Pt. 3) Pages: 8, 9, 13, 14 (Pt. 2)   7, 8, (Pt. 3)   9 (Pt. 4)	Secs.: 5.4, 9.2, 9.2.11 Fig.: 9.1 Pages: 28, 85, 102			
	US 5,734,430	Reed Solomon error correction	4	Secs.: 6, 6.1, 6.4.1.2 (Pt. 2) Pages: 8, 9, 13, 14 (Pt. 2)	Secs.: 9.2, 9.2.11, 9.5.2 Fig.: 9.1 Pages: 85, 102, 105			
	US 5,793,432	Reed Solomon error correction	3		Secs.: 7.4.4, 7.4.4.2, 9.2, 9.2.11 Fig.: 9.1 Pages: 55, 85, 102			
	US 6,016,172	service location descriptor	1			Secs.: 6.3, 6.3.1 Pages: 28, 29	Secs.: 6.3, 6.3.3, 6.3.4.2, 7.4.1 Figs.: 7.4, 7.5, 7.6 Pages: 26, 32, 33, 46-48	
	US Re. 36,992	symbol rate	67	Secs.: 6.3, 6.5.1 (Pt. 2) Figs.: 6.4, 6.14 (Pt. 2) Pages: 10, 12, 26 (Pt. 2)	Secs.: 4.1, 4.1.4, 9, 9.2 Figs.: 4.1, 9.1 Pages: 19-21, 82, 85			
	US 5,602,595	sync information	23	Secs.: 1, 6, 6.3, 6.5.1, 6.5.2, 6.9.3 (Pt. 2)   6.1 (Pt. 3)   6 (Pt. 4)   5.1 (Pt. 5) Figs.: 6.3, 6.14, 6.15 (Pt. 2) Pages: 6, 8, 10-12, 26, 27, 41 (Pt. 2)   9 (Pt. 3)   9 (Pt. 4)   8 (Pt. 5)	Secs.: 4, 4.1.4, 8.1, 9, 9.2, 9.2.1, 9.2.3 Figs.: 4.1, 9.1, 9.4, 9.5 Pages: 18, 20, 21, 71, 73, 82, 85, 87			
	US 5,600,677	trellis code	1	Secs.: 6.1, 6.4.1.4, 6.9.1 (Pt. 2) Figs.: 6.1, 6.8 (Pt. 2) Pages: 8, 9, 15, 16, 40 (Pt. 2)				
	US 5,636,251	trellis code	1	Secs.: 6.4.1.4 (Pt. 2) Figs.: 6.8 (Pt. 2) Pages: 15, 16 (Pt. 2)	Secs.: 4.1, 4.1.4, 9, 9.2, 9.2.3, 9.2.7, 9.2.9 Figs.: 4.1, 9.1, 9.5, 9.9, 9.11 Pages: 19, 20, 21, 82, 85, 91, 96, 97, 99, 100			
	US 5,802,107	trellis code	12	Secs.: 6.3, 6.4.1.4 (Pt. 2) Figs.: 6.3, 6.9 (Pt. 2) Table: 6.1 (Pt. 2) Pages: 10-12, 16, 17 (Pt. 2)	Secs.: 9, 9.2, 9.2.9 Figs.: 9.1, 9.12 Pages: 82, 85, 99, 100, 101			
	US Re. 36,980	trellis code	35	Secs.: 1, 6.1, 6.4.1.4 (Pt. 2) Fig.: 6.2 (Pt. 2) Pages: 6, 8, 9, 15 (Pt. 2)	Secs.: 9.2, 9.2.9 Figs.: 9.11, 9.13 Pages: 85, 99, 100, 101			
	US 5,987,070	trellis code: VSB	1	Secs.: 6, 6.1, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.1, 6.5.2.2, 6.5.2.3 (Pt. 2) Figs.: 6.1, 6.3, 6.8, 6.14, 6.15 (Pt. 2) Pages: 8-12, 15-17, 26-28 (Pt. 2)				
	US 5,999,569	trellis code: VSB	5	Secs.: 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1 (Pt. 2) Figs.: 6.3, 6.8, 6.14, 6.15 (Pt. 2) Pages: 10-12, 15, 16, 26, 27, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.2, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99-101			
	US 6,549,716	trellis code: VSB	2	Secs.: 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1 (Pt. 2) Figs.: 6.3, 6.8, 6.14, 6.15 (Pt. 2) Pages: 10-12, 15, 16, 26, 27, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.3, 9.2.5 Figs.: 9.1, 9.4 Pages: 82, 85, 90-93			

**Essential Patents Listed on October 1, 2011 Attachment 1 for ATSC Standard**  
 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	US Re. 38,483	trellis code: VSB	8	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1, 6.9.3 (Pt. 2) Figs.: 6.1, 6.3, 6.4, 6.8, 6.14, 6.15, 6.17 (Pt. 2) Pages: 8-12, 15, 16, 26, 27, 40, 41 (Pt. 2)	Secs.: 9, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.5 Figs.: 9.1, 9.2 Pages: 82, 85-88, 90, 92, 99, 100			
	US Re. 38,513	trellis code: VSB	8	Secs.: 1, 6, 6.4.1.4, 6.9.3 (Pt. 2) Figs.: 6.1, 6.4, 6.8 (Pt. 2) Pages: 6, 8, 9, 12, 15-16 (Pt. 2)				
	US Re. 39,111	trellis code: VSB	4	Secs.: 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1 (Pt. 2) Pages: 10-12, 15, 16, 26, 27, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.1, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.2, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99-101			
	US Re. 40,174	trellis code: VSB	15	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1 (Pt. 2) Figs.: 6.1, 6.3, 6.8, 6.14, 6.15 (Pt. 2) Pages: 8-12, 15, 16, 26, 27, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99, 100			
	US Re. 40,256	trellis code: VSB	18	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.3, 6.9.1 (Pt. 2) Figs.: 6.1, 6.3, 6.8, 6.14, 6.15 (Pt. 2) Pages: 8-12, 15, 16, 26-28, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99, 100			
	US 7,051,359	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 19, 20, 85	Secs.: 1.1.1, 5, 6.3.1 Pages: 9, 10, 20, 30, 33-35	Secs.: 6.3, 6.3.1 Pages: 26, 28, 29	
	US 7,051,361	virtual channel table	19		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 6.3.1, 6.9, 6.9.5 Table: 6.4 Pages: 9, 10, 20, 30, 33-35, 69, 74	Secs.: 6.3, 6.3.1 Pages: 26, 28, 29	
	US 7,073,194	virtual channel table	16		Secs.: 4.1, 9.2 Fig.: 4.1 Pages: 20, 85	Secs.: 1.1.1, 5, 5.1, 6.3, 6.3.1, 6.9.5 Pages: 9, 10, 20, 22, 28-30, 35, 74	Secs.: 6.3, 6.3.1 Pages: 26, 29	
	US 7,080,401	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 19, 20, 21, 85	Secs.: 1.1.1, 5, 6.3.1, 6.9, 6.9.5 Table: 6.4 Pages: 9, 10, 20, 30, 34, 35, 69, 74	Secs.: 6.3.1 Pages: 28, 29	
	US 7,100,189	virtual channel table	1		Secs.: 4.1, 4.1.2, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1.1.1, 5, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 30, 34, 35, 69, 74	Secs.: 6.3.1 Table: 6.2 Pages: 28, 29	
	US 7,448,064	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1.1.1, 5, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 30, 33-35	Secs.: 6.3, 6.3.1 Pages: 26, 28, 29	
	US 7,469,415	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1.1.1, 5, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 30, 33-35	Secs.: 6.3, 6.3.1 Pages: 26, 28, 29	
	US 7,603,695	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 6.3.1, 6.9, 6.9.5 Table: 6.4 Pages: 9, 10, 19, 29-35, 69, 74	Secs.: 6.3, 6.3.1 Pages: 26, 28, 29	
	US 7,620,972	virtual channel table	1		Secs.: 4.1, 4.1.2, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1.1.1, 5, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 30, 34, 35	Secs.: 6.3.1 Fig.: A.4 Table: 6.2 Pages: 28, 29, 56	

**Essential Patents Listed on October 1, 2011 Attachment 1 for ATSC Standard**  
 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	US 7,735,112	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.2, 6.3.1 Tables: 6.2, 6.4 Pages: 9, 10, 20, 22, 24, 26, 27, 30, 33-35	Secs.: 5.3, 5.3.1, 6.3, 6.3.1 Fig.: 5.3, A.4 Pages: 22, 23, 26, 28, 29, 56	
	US 7,748,024	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3.1, 6.9, 6.9.5 Tables: 6.4, 6.25a Pages: 9, 10, 20, 22, 30, 33-35, 69, 70, 74	Secs.: 6.3, 6.3.1, 6.9 Fig.: A.4 Table: 6.5 Pages: 26, 28, 29, 40, 56	
	US 7,757,266	virtual channel table	1		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3.1, 6.5, 6.9 Tables: 6.4, 6.11, 6.25a Pages: 9, 10, 19, 20, 22, 29, 30, 33-35, 41-44, 69, 70	Secs.: 5.3, 5.3.1, 6.3, 6.3.1, 6.4, 6.9, 6.9.1, 6.9.2, 6.9.3 Figs.: 5.3, A.4 Table: 6.5 Pages: 22, 23, 26, 28, 29, 34-36, 39-41, 56	
	US 7,779,447	virtual channel table	6		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 22, 30, 32-35	Secs.: 6.3, 6.3.1 Fig.: A.4 Pages: 26, 28, 29, 56	
	US 7,779,448	virtual channel table	8		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.1, 6.2, 6.3, 6.3.1, 6.4, 6.5 Table: 6.4 Pages: 9, 10, 20, 22, 23, 24, 28-30, 33-35, 38, 41	Secs.: 5.3, 5.3.1, 6.3, 6.3.1 Figs.: 5.3, A.4 Pages: 22, 23, 26, 28, 29, 56	
	US 7,802,289	virtual channel table	9		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3.1, 6.9, 6.9.4, 6.9.5, 6.9.6 Tables: 6.4, 6.25a Pages: 9, 10, 20, 22, 30, 33-35, 69, 70, 74, 76	Secs.: 6.3, 6.3.1, 6.9 Fig.: A.4 Table: 6.5 Pages: 26, 28, 29, 40, 56	
	US 7,814,529	virtual channel table	1			Secs.: 1.1.1, 5, 5.1, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 22, 29, 30, 33-35	Secs.: 6.3, 6.3.1 Fig.: A.3 Pages: 26, 28, 29, 55	
	US 7,814,530	virtual channel table	1			Secs.: 1.1.1, 5, 5.1, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 22, 29, 30, 33-35	Secs.: 6.3, 6.3.1 Fig.: A.3 Pages: 26, 28, 29, 55	
	US 7,831,994	virtual channel table	1			Secs.: 1.1.1, 5, 5.1, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 22, 29, 30, 33-35	Secs.: 6.3, 6.3.1 Fig.: A.3 Pages: 26, 28, 29, 55	
	US 7,882,534	virtual channel table	8		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 28, 30, 33-35	Secs.: 6.3, 6.3.1, 7.4.1 Figs.: 7.4, A.4 Pages: 26, 28, 29, 46, 47, 56	
	US 7,882,535	virtual channel table	8		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 28, 30, 33-35	Secs.: 5.3, 5.3.1, 6.3, 6.3.1 Figs.: 5.3, A.4 Pages: 22, 23, 26, 28, 29, 56	
	US 7,882,536	virtual channel table	6		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 28, 30, 33-35	Secs.: 6.3, 6.3.1 Fig.: A.4 Pages: 26, 28, 29, 56	
	US 7,886,331	virtual channel table	8		Secs.: 4.1, 4.1.4, 9.2 Fig.: 4.1 Pages: 20, 21, 85	Secs.: 1, 1.1.1, 5, 5.1, 6.3, 6.3.1 Table: 6.4 Pages: 9, 10, 20, 28, 30, 31, 33-35	Secs.: 6.3, 6.3.1 Fig.: A.4 Pages: 26, 28, 29, 56	
	US 5,600,378	virtual channel table & program_number	1	Secs.: 6, 6.1 (Pt. 2)   5 (Pt. 3) Figs.: 6.1 (Pt. 2)   5.1 (Pt. 3) Pages: 8-9 (Pt. 2)   7-8 (Pt. 3)		Secs.: 3.3, 5.1, 6.3.1 Pages: 15, 22, 32, 35-36	Secs.: 1.1, 5, 5.3, 6.3, 6.3.1, 6.3.2, 6.3.4.2, A1.1, A1.1.1 Table: 6.3 Fig. A.4 Pages: 10, 11, 19, 22, 26-31, 33-34, 51, 52, 56	
	US 6,215,530	virtual channel table & program_number	9	Secs.: 6.1 (Pt. 2)   5 (Pt. 3) Figs.: 6.1 (Pt. 2)   5.1 (Pt. 3) Pages: 8-9 (Pt. 2)   7-8 (Pt. 3)		Secs.: 4, 5.1, 6.3.1 Pages: 14-15, 21-22, 31, 34	Secs.: 6.3.1, 6.3.2, 6.3.4.2 Table: 6.3 Pages: 28, 30-31, 33-34	

**Essential Patents Listed on October 1, 2011 Attachment 1 for ATSC Standard**  
 This chart shows *illustrative* essential claims of each patent. (Other claims may also be essential.)

City	Patent	Description	Claim	A/53	A/54A	A/65C	A/69	A/74
	US Re. 39,902	VSB	15	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1, 6.9.2 (Pt. 2) Figs.: 6.1, 6.3, 6.4, 6.8, 6.14, 6.15 (Pt. 2) Pages: 8-12, 15, 16, 26, 27, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99, 100			
	US Re. 40,134	VSB	14	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.3, 6.9.1 (Pt. 2) Figs.: 6.1, 6.3, 6.8, 6.14, 6.15 (Pt. 2) Pages: 8-12, 15, 16, 26-28, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 82, 85, 86, 88, 90-92, 99, 100			
	US Re. 40,242	VSB	17	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1, 6.9.3 (Pt. 2)   5 (Pt. 3) Figs.: 6.1, 6.3, 6.4, 6.8, 6.14, 6.15, 6.17 (Pt. 2)   5.1 (Pt. 3) Pages: 8-12, 15, 16, 26, 27, 40, 41 (Pt. 2)   8 (Pt. 3)	Secs.: 8.4, 9, 9.2, 9.2.2, 9.2.3, 9.2.5 Figs.: 9.1, 9.3 Pages: 75, 76, 82, 85, 86, 88, 90, 92			
	US Re. 40,701	VSB	15	Secs.: 6, 6.3, 6.5.1, 6.5.2 (Pt. 2) Figs.: 6.1, 6.3, 6.14, 6.15 (Pt. 2) Pages: 8-12, 26, 27 (Pt. 2)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.7 Figs.: 9.1, 9.4-9.6 Pages: 82, 85-88, 90-93, 96			
	US Re. 40,936	VSB	8	Secs.: 6, 6.1, 6.3, 6.4.1.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.3, 6.5.2.5, 6.9.1 (Pt. 2) Figs.: 6.1, 6.3, 6.7-6.9, 6.14, 6.15 (Pt. 2) Pages: 8-12, 14-17, 26-29, 40 (Pt. 2)	Secs.: 8.1, 9, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.5, 9.2.9, 9.2.10 Figs.: 9.1-9.3, 9.11, 9.14 Pages: 72, 82, 85, 86, 88, 90, 92, 99-101			
	US Re. 40,978	VSB	14	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.3, 6.9.1 (Pt. 2) Figs.: 6.1, 6.3, 6.8, 6.14, 6.15 (Pt. 2) Pages: 8-12, 15, 16, 26-28, 40 (Pt. 2)	Secs.: 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 82, 85, 86, 88, 90, 92, 99, 100			
	US Re. 41,146	VSB	8	Secs.: 6, 6.1, 6.3, 6.4.1.3, 6.4.1.4, 6.5.1, 6.5.2, 6.5.2.3, 6.5.2.5, 6.9.1 (Pt. 2) Figs.: 6.1, 6.3, 6.7-6.9, 6.14, 6.15 (Pt. 2) Pages: 8-12, 14-17, 26-29, 40 (Pt. 2)	Secs.: 8.1, 9, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.5, 9.2.7, 9.2.9, 9.2.10 Figs.: 9.1-9.6, 9.11, 9.14 Pages: 72, 82, 85-88, 90-93, 96, 99-101			
	US Re. 42,643	VSB	14	Secs.: 6, 6.3, 6.4.1.4, 6.5.1, 6.5.2, 6.9.1, 6.9.2, 6.9.3 (Pt. 2)   5 (Pt. 3) Figs.: 6.1, 6.3, 6.4, 6.8, 6.14, 6.15, 6.17 (Pt. 2)   5.1 (Pt. 3) Pages: 8-12, 15, 16, 26, 27, 40, 41 (Pt. 2)   8 (Pt. 3)	Secs.: 8.4, 9, 9.2, 9.2.2, 9.2.3, 9.2.5, 9.2.9 Figs.: 9.1, 9.3 Pages: 75, 76, 82, 85, 86, 88, 90, 92, 99, 100			