

SISVEL LTE PATENT BROCHURE

The information below is provided for the convenience of the parties interested in a license under the LTE Patents of Sisvel Mobile Communication Program, and it is not intended to be exhaustive or restrictive. The versions of the technical specifications indicated below are exemplary, and previous or subsequent versions of such specifications may also be relevant. Please note that the listed patent families may be essential to separate specifications and/or Section in addition to those disclosed below and claims other than those mentioned may be relevant as well.

Please also note that the license offered may include patent applications and/or patents that are not (yet) listed in this brochure, as they still may be in prosecution or under evaluation for essentiality. This brochure, may also include patents that may have lapsed/expired or may lapse/expire during the terms of any license offer, which only require royalties for past use during the corresponding terms of such patents. The existence of patent applications being granted and/or patents being lapsed/expired during the term of a license agreement has been accounted in the rates offered under any of the relevant license offers.

Family	Patent Owner	Exemplary Patent	Family Members	Claim(s)	Illustrative section(s) of the standard	ETSI Declaration	Filing Date
LTE001	Airbus DS	FR2829642		1	3GPP TS 36.211 V9.1.0: Sections 6.1, 6.1.1, 6.2, 6.2.1, 6.2.2, 6.10, 6.10.1, 6.10.1.1, 6.10.1.2, 6.10.2, 6.10.2.1, 6.10.2.2, 6.10.3, 6.10.3.1, 6.10.3.2, 6.10.4, 6.10.4.1, 6.10.4.2, 7.2; Figures 6.2.2-1, 6.10.1.2-1, 6.10.1.2-2, 6.10.2.2-1, 6.10.2.2-3, 6.10.3.2-1, 6.10.3.2-2, 6.10.3.2-3, 6.10.4.2-1, 6.10.4.2-2	ISLD-201309-002	12 Sep 2001
			US7471728				
LTE002	Airbus DS	EP1364547		1	3GPP TS 36.133 v9.3.0: Section 7.6, 7.6.1, 8.1.2.2.1.1, 3GPP TS 36.211 v9.1.0: Section 5.2.1, 6.2.1, Figure 5.2.1-1 3GPP TS 36.213 v9.1.0: Section 5.1, 3GPP TS 36.214 v9.1.0: Section 5.2.2, 3GPP TS 36.300 v9.2.0: Section 10.1, 10.1.2, Figure 10.1.2.1.1-1 3GPP TS 36.321 v9.1.0: Section 5.10 3GPP TS 36.331 v9.1.0: Section 5.5.1, 6.2.2, 6.3.5, 10.2.2	ISLD-201309-002	01 Mar 2002
			CA2439566				01 Mar 2002
			EP1364547(DE)				01 Mar 2002
			EP1364547(FR)				01 Mar 2002
			EP1364547(GB)				01 Mar 2002
			EP1364547(IT)				01 Mar 2002
US7254393				01 Mar 2002			
LTE003	Airbus DS	US7224683		1, 11	3GPP TS 36.300 V8.12.0: Section 4 3GPP TS 36.211 V8.9.0: Sections 4, 4.1, 4.2, 5, 5.1, 5.2, 5.2.1, 5.2.2, 5.2.3; Figures 4.1-1, 4.2-1, 5.2.1-1. 3GPP TS 36.331 V8.19.0: Sections 1, 3, 3.2, 5, 5.3, 5.3.1, 5.3.1.1, 5.3.10, 5.3.10.0, 5.3.10.1, 5.3.10.5, 6, 6.3, 6.3.2 3GPP TS 36.321 V8.12.0: Sections 5, 5.10, 5.10.2. 3GPP TS 36.213 V8.8.0: Sections 8, 8.3; Tables 8-1, 8.3-1	ISLD-201309-002	01 Aug 2000
			EP1198906(FR)		1, 13	3GPP TS 36.201 V11.1.0: Sections 4, 4.1, 4.1.1, 4.2, 4.2.1, 4.3, 4.3.1, 6, 6.1.2 3GPP TS 36.211 V11.1.0: Sections 4, 4.1, 5.2.3 3GPP TS 36.300 V11.1.0: Sections 11.1, 11.1.1, 11.1.2 3GPP TS 36.321 V11.1.0: Sections 5.10, 5.10.1, 5.10.2	ISLD-201309-002
LTE021	KPN	US9014667		35	3GPP TS 22.368 V10.5.0; sections 3.1, 3.2, 4, 7.1.1 and Annex: A: Informative 3GPP TS 22.003 V10.10.0; section 2.1 3GPP TS 23.060 V10.14.0; sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.2, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.3, 5.3.6.4, 5.3.13.2, 5.6.3, 6.5.0, 6.8.2.2, 13.1, 13.2.1, 13.2.3, 13.4, 14.1 and 14.2 3GPP TS 24.008 V10.15.0; sections 4.1.1.7, 4.7.3.1.4 and 6.1.3.11	ISLD-201304-005 ISLD-201304-008 ISLD-201304-010 ISLD-201304-011 ISLD-201901-011 ISLD-201902-001	27 Aug 2010



LTE021	KPN	JP5308459		35	3GPP TS 23.060 V10.5.0: Sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.4, 5.6.3, 6.5.0, 14.1 and 14.2. 3GPP TS 23.003 V10.3.0: Section 2.1. 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 9.4.4.2, 9.4.22 and 9.4.22.1. 3GPP TS 22.368 V11.3.0: Annex A.	ISLD-201304-005 ISLD-201304-008 ISLD-201304-010 ISLD-201304-011 ISLD-201901-011 ISLD-201902-001	19 Feb 2009		
		EP2337403		16, 30, 34	3GPP TS 22.368 v10.5.0: Annex A: informative 3GPP TS 23.003 v10.10.0: Sections 2.1, 2.8.1, 3GPP TS 23.060 v10.14.0: Sections 14.1, 14.2, 14.2A, 3GPP TS 23.401 v10.13.0: Sections 4.3.1, 4.3.2, 4.3.7.4, 4.3.7.4.1, 4.3.7.4.2, 4.3.7.4.2.1, 4.3.7.4.2.3, 4.3.7.4.2.4, 5.1.1, 5.1.1.1, 5.2.2, 5.3.2.1, 5.3.9, 5.5.1.2.5 3GPP TS 24.301 v10.15.0: Sections 5.3.9, 5.5.1.2.5, 6.3.5, 8.2.3, 8.2.3.1, 8.2.3.3; Table 8.2.3.1	ISLD-201304-005 ISLD-201304-008 ISLD-201304-010 ISLD-201304-011 ISLD-201901-011 ISLD-201902-001	19 Feb 2009		
		EP2250835		15, 16, 29	3GPP TS 22.368 v10.5.0: Annex A: informative 3GPP TS 23.003 v10.10.0: Section 2.1 3GPP TS 23.060 v10.14.0: Sections 5.3.0, 5.3.1, 5.3.6.2, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.6.3, 5.3.6.4, 6.5.0, 14.1, 14.2 3GPP TS 24.008 v10.15.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 9.4.4.2; Table: 9.4.4	ISLD-201304-005 ISLD-201304-008 ISLD-201304-010 ISLD-201304-011 ISLD-201901-011 ISLD-201902-001	19 Feb 2009		
			CNZL200980106811.7						19 Feb 2009
			CNZL201310055246.4						19 Feb 2009
			CNZL201310055254.9						19 Feb 2009
			CNZL201310055256.8						19 Feb 2009
			EP2250835(AT)						19 Feb 2009
			EP2250835(BE)						19 Feb 2009
			EP2250835(CH)						19 Feb 2009
			EP2250835(DE)						19 Feb 2009
			EP2250835(DK)						19 Feb 2009
			EP2250835(ES)						19 Feb 2009
			EP2250835(FI)						19 Feb 2009
			EP2250835(FR)						19 Feb 2009
			EP2250835(GB)						19 Feb 2009
			EP2250835(IE)						19 Feb 2009
			EP2250835(IS)						19 Feb 2009
			EP2250835(IT)						19 Feb 2009
			EP2250835(NL)						19 Feb 2009
			EP2250835(PL)						19 Feb 2009
			EP2250835(SE)						19 Feb 2009
			EP2291033(AT)						19 Feb 2009
			EP2291033(BE)						19 Feb 2009
			EP2291033(CH)						19 Feb 2009
			EP2291033(DE)						19 Feb 2009
			EP2291033(DK)						19 Feb 2009
			EP2291033(ES)						19 Feb 2009
			EP2291033(FI)						19 Feb 2009
			EP2291033(FR)						19 Feb 2009
			EP2291033(GB)						19 Feb 2009
			EP2291033(IE)						19 Feb 2009
			EP2291033(IS)						19 Feb 2009
			EP2291033(IT)						19 Feb 2009
	EP2291033(NL)						19 Feb 2009		
	EP2291033(PL)						19 Feb 2009		
	EP2291033(SE)						19 Feb 2009		
	EP2337403(DE)						19 Feb 2009		
	EP2337403(FI)						19 Feb 2009		
	EP2337403(FR)						19 Feb 2009		

LTE021	KPN		EP2337403(GB)				19 Feb 2009
			EP2337403(NL)				19 Feb 2009
			EP2337403(SE)				19 Feb 2009
			IN273372				19 Feb 2009
			JP5684323				19 Feb 2009
			JP5841566				19 Feb 2009
			JP5926433				19 Feb 2009
			KR101231986				19 Feb 2009
			US10187904				29 Feb 2016
			US9247426				18 Jun 2013
			US9253637				18 Jun 2013
	US9781743				06 Jun 2014		
LTE022	KPN	EP0831613		1	3GPP TR 21.905 V11.3.0: Section 3: 0-9 ETSI TS 136 212 V8.8.0: Sections 1, 5, 5.1.1, 5.1.2, 5.3.2, 5.3.2.1 ; Figure 5.3.2-1	ISLD-201203-018	21 Nov 1996
			EP0831613(BE)				21 Nov 1996
			EP0831613(CH)				21 Nov 1996
			EP0831613(DE)				21 Nov 1996
			EP0831613(ES)				21 Nov 1996
			EP0831613(FI)				21 Nov 1996
			EP0831613(FR)				21 Nov 1996
			EP0831613(IE)				21 Nov 1996
			EP0831613(IT)				21 Nov 1996
			EP0831613(LU)				21 Nov 1996
			EP0831613(NL)				21 Nov 1996
	EP0831613(SE)				21 Nov 1996		
LTE023	KPN	US6212662		1, 2, 3	3GPP TS 36.212 V9.3.0: Section 5, 5.1, 5.1.1, 5.1.2, 5.1.3, Table 5.1.3-1, 5.1.3-3, 5.1.3.2, 5.1.3.2.1, Figure 5.1.3-2, 5.1.3.2.3,	ISLD-201202-010	26 Jul 1999
			EP0751643(DE)				24 Jun 1996
			EP0751643(FR)				24 Jun 1996
			EP0751643(GB)				24 Jun 1996
			EP0751643(NL)				24 Jun 1996
			EP2271016(BE)				24 Jun 1996
			EP2271016(CH)				24 Jun 1996
			EP2271016(DE)				24 Jun 1996
			EP2271016(FI)				24 Jun 1996
			EP2271016(FR)				24 Jun 1996
			EP2271016(GB)				24 Jun 1996
			EP2271016(IT)				24 Jun 1996
			EP2271016(LI)				24 Jun 1996
			EP2271016(LU)				24 Jun 1996
			EP2271016(MC)				24 Jun 1996
			EP2271016(NL)				24 Jun 1996
	EP2271016(PT)				24 Jun 1996		
	US5978959				26 Jun 1996		
LTE024	KPN	EP2299649		1, 15	3GPP TS 23.228 V10.4.0: Sections 3.1, 4.14, 3GPP TS 24.229 V10.3.0: Sections 1, 3.2, 5.3, 5.3.2, 5.3.2.1, 5.3.2.1A, 5.4, 5.4.3.1, 5.4.3.2, 5.7, 5.7.1.3A, 5.7.1.7, 5.7.1.7.25.10, 5.10.1, 5.10.3, 5.10.3.2, 7.2A, 7.2A.6, 7.2A.6.1, 7.2A.6.3 ETSI TS 124 229 V10.3.0	ISLD-201302-007 ISLD-201302-008 ISLD-201304-014 ISLD-202004-003	16 Sep 2010
			CNZL201010535276.1				17 Sep 2010
			EP2299649(DE)				16 Sep 2010
			EP2299649(ES)				16 Sep 2010
			EP2299649(FI)				16 Sep 2010

LTE024	KPN		EP2299649(FR)				16 Sep 2010	
			EP2299649(GB)				16 Sep 2010	
			EP2299649(HU)				16 Sep 2010	
			EP2299649(IT)				16 Sep 2010	
			EP2299649(NL)				16 Sep 2010	
			EP2299649(PL)				16 Sep 2010	
			EP2299649(SE)				16 Sep 2010	
			JP5237340				16 Sep 2010	
			US8601141				16 Sep 2010	
LTE025	TNO	EP2073551		1	3GPP TS 26.247 V11.1.0: Sections 2, 5.1, 5.3, 7.1, 7.2, 8.1, 8.4.1 and 8.4.4.1; Figures 3, 7-1 and 7-2	ISLD-201301-003 ISLD-201304-016 ISLD-201304-020 ISLD-201601-003	20 Dec 2007	
				EP2073551(DE)				20 Dec 2007
				EP2073551(ES)				20 Dec 2007
				EP2073551(FI)				20 Dec 2007
				EP2073551(FR)				20 Dec 2007
				EP2073551(GB)				20 Dec 2007
				EP2073551(IT)				20 Dec 2007
				EP2073551(NL)				20 Dec 2007
				EP2073551(SE)				20 Dec 2007
			LTE026	KPN	US8549151		1	3GPP TS 26.234 V10.5.0 Sections 5.6.1; and 5.6.2 3GPP TS 26.237 V10.8.0 Sections 4.3; Figure 3; Figure 4; 8.1; 8.2.3.1; Figure 7; 8.2.3.2; 8.2.4.1 Figure 8; 8.2.4.2; 8.2.4.3; 13; 13.1; Figure 30; 13.2; 21; 21.1.1; Figure 46; and 21.1.4 3GPP TS 26.114 V10.8.0 Sections 4.1; Figure 4.1; 6.1 and 6.2.1
JP4987126		1				3GPP TS 26.237 V10.8.0; Section 4.3, 7, 7.1, 8, 8.1, 8.2.3, 8.2.3.1, 8.2.3.2, 13, 13.1, 13.2, Figures 3, 4, 7 and 30; 3GPP TS 26.114 V10.8.0; Section 4.1, 6, 6.1, and Figure 4.1 3GPP TS 26.346 V9.15.0; Section 5.2, 5.2.1, 5.2.3, 5.2.3.1, 5.2.4, 5.2.5, 5.2.5.1, 5.2.5.7, and 5.2.5.8	ISLD-201401-007 ISLD-201911-046	22 Dec 2008
	CNZL200880121914.6					1	3GPP TS26.237 V10.8.0, Sections 4.3, 8.1, 8.2.3, 8.2.3.1, 8.2.3.2, 13, 13.2, 21, 21.1 and 21.1.1, Figures 3, 4, 7, 30 and 46 3GPP TS26.114 V10.8.0, sections 4.1, 6, 6.1, 6.2 and 6.2.1 and Figure 4.1	ISLD-201401-007 ISLD-201911-046
CNZL201510580059.7								22 Dec 2008
		EP2225866(DE)						22 Dec 2008
		EP2225866(FI)						22 Dec 2008
		EP2225866(FR)						22 Dec 2008
		EP2225866(GB)						22 Dec 2008
		EP2225866(IT)						22 Dec 2008
		EP2225866(NL)						22 Dec 2008
		EP2225866(PL)						22 Dec 2008
		EP2225866(SE)						22 Dec 2008
		EP2225866(TR)						22 Dec 2008
		EP3349412(DE)						22 Dec 2008
		EP3349412(FR)						22 Dec 2008
	EP3349412(GB)				22 Dec 2008			
	EP3349412(IT)				22 Dec 2008			
	EP3349412(NL)				22 Dec 2008			
	EP3349412(PL)				22 Dec 2008			
	HK1149861					22 Dec 2008		
	IN273904					22 Dec 2008		
	US9654330					22 Dec 2008		

LTE027	KPN	EP2567564		1	3GPP TS 32.551 V11.3.1: Sections 3.1, 4.1.1 3GPP TS 36.300 V11.9.0: Sections 20.2.2.15, 22.4.4.2 3GPP TS 36.413 V11.6.0: Sections B.1.14	ISLD-201505-009	04 May 2011	
			CNZL201180022801.2				04 May 2011	
			EP2567564(DE)				04 May 2011	
			EP2567564(FI)				04 May 2011	
			EP2567564(FR)				04 May 2011	
			EP2567564(GB)				04 May 2011	
			EP2567564(NL)				04 May 2011	
			EP2567564(SE)				04 May 2011	
			JP5969983				04 May 2011	
US9210590				04 May 2011				
US9462544				04 May 2011				
LTE028	KPN	US8626175		1	3GPP TS 36.331 V10.15.0 Section 5.6.1; 5.6.6.2; 6.2.2; 5.6.5. 3GPP TS 32.521 V10.2.0: Section 5.1.5 and 5.4.3 3GPP TS 32.522 V10.6.0: Section 4.5.3.1 and 4.5.5 3GPP TS 37.320 V10.4.0: Annex A, Section 3.1, 4.1.5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3.2 and 5.1.1.3.3; Figure 5.1.1.1-1	ISLD-201505-005	16 Dec 2010	
			JP5536230		1, 6	3GPP TS 36.304 V10.7.0 Section 8 3GPP TS 36.306 V10.10.0, Section 4.3.13 3GPP TS 36.331 V10.15.0, Section 5.6.6.1; 5.6.6.2; 6.2.2; 5.6.5 3GPP TS 32.422 V10.13.0: Section 4.1.1.2a, 4.1.5 and 6; Figure 6.2 3GPP TS 32.521 V10.2.0: Section 5.1.5 and 5.4.3 3GPP TS 32.522 V10.6.0: Section 4.5.3.1 and 4.5.5 3GPP TS 37.320 V10.4.0: Section 3.1, 4.1, 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3.2, 5.1.1.3.3 and Annex A	ISLD-201505-005	16 Dec 2010
				EP2517495		1	3GPP TS 32.521 V10.2.0: Section 4.1 3GPP TS 32.522 V10.6.0: Section 4.5.3.1 3GPP TS 36.331 V10.12.0: Sections 5.6.5.1, 5.6.5.2, 5.6.5.3, 5.6.6.1, 5.6.6.2 3GPP TS 37.320 V10.4.0: Sections 4.1, 5.1.1.1, 5.1.1.3.2, 5.1.1.3.3, 5.1.3, 5.1.4, 7, Annex A	ISLD-201505-005
		CNZL201080058898.8						16 Dec 2010
		EP2517495(DE)						16 Dec 2010
		EP2517495(ES)						16 Dec 2010
		EP2517495(FI)						16 Dec 2010
		EP2517495(FR)					16 Dec 2010	
		EP2517495(GB)				16 Dec 2010		
		EP2517495(NL)				16 Dec 2010		
		EP2517495(PL)				16 Dec 2010		
		EP2517495(SE)				16 Dec 2010		
LTE029	3G Licensing	US7313518		10	3GPP TS 22.243 V8.0.0 sections 1, 3.1, 4, 5 and 7, figure 1, as referring to ETSI ES 202 050 V1.1.5 3GPP TS 26.243 V8.0.0 section 2 as referring to ETSI 202 050 V1.1.5 3GPP TS 26.177 V8.0.0 section 2 as referring to ETSI 202 050 V1.1.5 3GPP ETSI ES 202 050 V1.1.5 sections 4, 5.1.1, 5.1.3, 5.1.4 and 5.1.5, and figures 4.1, 5.1 and 5.2	ISLD-200211-003 ISLD-200506-005 ISLD-201409-019 ISLD-201409-020 ISLD-201409-021 ISLD-201607-001 ISLD-201607-002	19 Nov 2001	
			BRPI0116844-4 CA2436318 CNZL01822358.3 EP1356461(DE) EP1356461(ES) EP1356461(FR) EP1356461(GB) EP1356461(IT)					19 Nov 2001
								19 Nov 2001
								19 Nov 2001
								19 Nov 2001
								19 Nov 2001
								19 Nov 2001

LTE029	3G Licensing		EP1356461(NL)				19 Nov 2001
			EP1356461(TR)				19 Nov 2001
			JP4210521				19 Nov 2001
			KR100549133				19 Nov 2001
			MX243041				19 Nov 2001
LTE030	3G Licensing	JP4933528		1	3GPP TS 23.060 V8.9.0: Sections 1, 3.1, 4, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.1.1, 5.4.1.2, 9.2.1A and 9.6; Figure 1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2.1, 4.2.2, 4.3.2.1, 4.3.2.2, 4.4.3.1, 4.4.3.2, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7.1, 4.7.2.1 and 4.7.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1 and 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2.1, 4.2.2, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3 and 8.5.1; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4.2.3-2, 4.10.3-1, 4.8.1.1-1 and 8.5.1-1 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6.1.0, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.1.0, A.1.0, A.1.1.2, A.1.1.3, A.4.0, A.4.1.1, A.4.1.2, A.5.0, A.5.1.0, A.5.1.1, D.1.1, D.2, H.1 and H.2; Figures A.1, A.4, D.1.1 and D.2.1	ISLD-201211-004 ISLD-201211-006 ISLD-201211-007 ISLD-201211-008 ISLD-201607-001 ISLD-201607-002	22 Mar 2006
		EP1869840		1	3GPP TS 23.060 V8.9.0: Sections 1, 3.1, 4, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.1.1, 5.4.1.2, 9.2.1A and 9.6; Figure 1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2.1, 4.2.2, 4.3.2.1, 4.3.2.2, 4.4.3.1, 4.4.3.2, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7.1, 4.7.2.1 and 4.7.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1 and 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2.1, 4.2.2, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3 and 8.5.1; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4.2.3-2, 4.10.3-1, 4.8.1.1-1 and 8.5.1-1 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6.1.0, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.1.0, A.1.0, A.1.1.2, A.1.1.3, A.4.0, A.4.1.1, A.4.1.2, A.5.0, A.5.1.0, A.5.1.1, D.1.1, D.2, H.1 and H.2; Figures A.1, A.4, D.1.1 and D.2.1	ISLD-201211-004 ISLD-201211-006 ISLD-201211-007 ISLD-201211-008 ISLD-201607-001 ISLD-201607-002	22 Mar 2006
		CNZL200680017858.2		1	3GPP TS 23.060 V8.9.0: Sections 1, 3.1, 4, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.1.1, 5.4.1.2, 9.2.1A and 9.6; Figure 1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2.1, 4.2.2, 4.3.2.1, 4.3.2.2, 4.4.3.1, 4.4.3.2, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7.1, 4.7.2.1 and 4.7.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1 and 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2.1, 4.2.2, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3 and 8.5.1; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4.2.3-2, 4.10.3-1, 4.8.1.1-1 and 8.5.1-1 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6.1.0, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.1.0, A.1.0, A.1.1.2, A.1.1.3, A.4.0, A.4.1.1, A.4.1.2, A.5.0, A.5.1.0, A.5.1.1, D.1.1, D.2, H.1 and H.2; Figures A.1, A.4, D.1.1 and D.2.1	ISLD-201211-004 ISLD-201211-006 ISLD-201211-007 ISLD-201211-008 ISLD-201607-001 ISLD-201607-002	22 Mar 2006
		CNZL201210078576.0					22 Mar 2006
		EP1869840(DE)					22 Mar 2006
		EP1869840(ES)					22 Mar 2006
		EP1869840(FR)					22 Mar 2006
		EP1869840(GB)					22 Mar 2006
		EP1869840(IE)					22 Mar 2006
		EP1869840(IT)					22 Mar 2006
		EP1869840(NL)					22 Mar 2006
		EP1869840(PL)					22 Mar 2006
		EP1869840(TR)					22 Mar 2006
US8570936					22 Mar 2006		
US9813940					22 Mar 2006		
LTE031	3G Licensing	US8565159		1	3GPP TS 23.060 V8.15.0: Sections 1, and 4 3GPP TS 23.327 V8.4.0: Sections 1, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, and 6.3.2.2 and Figures 5.2.1-1, 6.1, 6.3.1-1, and 6.3.2.2-1; 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, and 6.2.6, and Figure 6.2a	ISLD-201211-009 ISLD-201211-010 ISLD-201211-011 ISLD-201607-001 ISLD-201607-002	15 Jan 2007

LTE031	3G Licensing	US8194608		1	3GPP TS 23.060 V8.15.0: Sections 1, and 4 3GPP TS 23.327 V8.4.0: Sections 1, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, and 6.3.2.2 and Figures 5.2.1-1, 6.1, 6.3.1-1, and 6.3.2.2-1; 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, and 6.2.6, and Figure 6.2a	ISLD-201211-009 ISLD-201211-010 ISLD-201211-011 ISLD-201607-001 ISLD-201607-002	15 Jan 2007	
		CNZL200780009678.4		1	3GPP TS 23.060 V8.15.0: Sections 1, and 4 3GPP TS 23.327 V8.4.0: Sections 1, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, and 6.3.2.2 and Figures 5.2.1-1, 6.1, 6.3.1-1, and 6.3.2.2-1; 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, and 6.2.6, and Figure 6.2a	ISLD-201211-009 ISLD-201211-010 ISLD-201211-011 ISLD-201607-001 ISLD-201607-002	15 Jan 2007	
			EP1974576(DE)					15 Jan 2007
			EP1974576(ES)					15 Jan 2007
			EP1974576(FR)					15 Jan 2007
			EP1974576(GB)					15 Jan 2007
			EP1974576(IT)					15 Jan 2007
			EP2958292(DE)					15 Jan 2007
			EP2958292(ES)					15 Jan 2007
			EP2958292(FR)					15 Jan 2007
			EP2958292(GB)					15 Jan 2007
	EP2958292(IT)					15 Jan 2007		
	EP2958292(NL)					15 Jan 2007		
		HK1219367					15 Jan 2007	
LTE032	3G Licensing	US8971246		1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1, and 5.10.2 and Figures 4.2.1-1, 4.2.1-2 and 4.7.2.2-1	ISLD-201211-012 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
		US8072923		1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1, and 5.10.2 and Figures 4.2.1-1, 4.2.1-2 and 4.7.2.2-1	ISLD-201211-012 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
		JP5491650		1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1, and 5.10.2 and Figures 4.2.1-1, 4.2.1-2 and 4.7.2.2-1	ISLD-201211-012 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
		JP5384934		1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1, and 5.10.2 and Figures 4.2.1-1, 4.2.1-2 and 4.7.2.2-1	ISLD-201211-012 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
		CNZL200680016492.7		1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1, and 5.10.2 and Figures 4.2.1-1, 4.2.1-2 and 4.7.2.2-1	ISLD-201211-012 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
			CNZL201110148681.2					23 Mar 2006
			EP1861981(DE)					23 Mar 2006
			EP1861981(FR)					23 Mar 2006
			EP1861981(GB)					23 Mar 2006
			EP1861981(IT)					23 Mar 2006
				EP1861981(NL)				23 Mar 2006
LTE033	3G Licensing	US9001732		1	3GPP TS 23.060 V8.9.0: subclauses 4, 9.2.1A, 9.2.2.1; and Figs 63 and 64 3GPP TS 23.401 V8.15.0: subclauses 1.3.1, 4.1, 4.2.1, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1; and Fig 4.2.1-2, and Fig 4.7.2.2-1 3GPP TS 24.008 V8.10.0: subclauses 10.5.6.4; Fig 10.5.137; and Table 10.5.155	ISLD-201211-013 ISLD-201211-014 ISLD-201211-015 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
		US8064384		1	3GPP TS 23.060 V8.9.0: subclauses 4, 9.2.1A, 9.2.2.1; and Figs 63 and 64 3GPP TS 23.401 V8.15.0: subclauses 1.3.1, 4.1, 4.2.1, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1; and Fig 4.2.1-2, and Fig 4.7.2.2-1 3GPP TS 24.008 V8.10.0: subclauses 10.5.6.4; Fig 10.5.137; and Table 10.5.155	ISLD-201211-013 ISLD-201211-014 ISLD-201211-015 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	

LTE033	3G Licensing	JP4970422		1	3GPP TS 23.060 V8.9.0: subclauses 4, 9.2.1A, 9.2.2.1; and Figs 63 and 64 3GPP TS 23.401 V8.15.0: subclauses 1.3.1, 4.1, 4.2.1, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1; and Fig 4.2.1-2, and Fig 4.7.2.2-1 3GPP TS 24.008 V8.10.0: subclauses 10.5.6.4; Fig 10.5.137; and Table 10.5.155	ISLD-201211-013 ISLD-201211-014 ISLD-201211-015 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
		CNZL200680017166.8		1	3GPP TS 23.060 V8.9.0: subclauses 4, 9.2.1A, 9.2.2.1; and Figs 63 and 64 3GPP TS 23.401 V8.15.0: subclauses 1.3.1, 4.1, 4.2.1, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1; and Fig 4.2.1-2, and Fig 4.7.2.2-1 3GPP TS 24.008 V8.10.0: subclauses 10.5.6.4; Fig 10.5.137; and Table 10.5.155	ISLD-201211-013 ISLD-201211-014 ISLD-201211-015 ISLD-201607-001 ISLD-201607-002	23 Mar 2006	
			EP1861982(BE)					23 Mar 2006
			EP1861982(CH)					23 Mar 2006
			EP1861982(DE)					23 Mar 2006
			EP1861982(ES)					23 Mar 2006
			EP1861982(FR)					23 Mar 2006
			EP1861982(GB)					23 Mar 2006
			EP1861982(IT)					23 Mar 2006
			EP1861982(NL)					23 Mar 2006
	EP1861982(PL)					23 Mar 2006		
	EP1861982(SE)					23 Mar 2006		
	EP1861982(TR)					23 Mar 2006		
LTE034	3G Licensing	US8179888		1	3GPP TS 29.060 V8.3.0: section 3.1 3GPP TS 23.401 V8.10.0: sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, and 5.1.2.5-1 3GPP TS 29.061 V8.6.0: sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4, 11.2.1.3.1, 11.3, figures 11c, 11d, 11e, 11bb and 11ba 3GPP TS 23.060 V8.10.0: sections 9.2.2, 9.2.2.1, 9.2.2.1A, 14.5, figures 63 and 64	ISLD-201308-022 ISLD-201308-023 ISLD-201308-024 ISLD-201607-001 ISLD-201607-002	11 Jul 2005	
		EP1772030		1	3GPP TS 29.060 V8.3.0: section 3.1 3GPP TS 23.401 V8.10.0: sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, and 5.1.2.5-1 3GPP TS 29.061 V8.6.0: sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4, 11.2.1.3.1, 11.3, figures 11c, 11d, 11e, 11bb and 11ba 3GPP TS 23.060 V8.10.0: sections 9.2.2, 9.2.2.1, 9.2.2.1A, 14.5, figures 63 and 64	ISLD-201308-022 ISLD-201308-023 ISLD-201308-024 ISLD-201607-001 ISLD-201607-002	11 Jul 2005	
		CNZL200580025881.1		1	3GPP TS 29.060 V8.3.0: section 3.1 3GPP TS 23.401 V8.10.0: sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, and 5.1.2.5-1 3GPP TS 29.061 V8.6.0: sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4, 11.2.1.3.1, 11.3, figures 11c, 11d, 11e, 11bb and 11ba 3GPP TS 23.060 V8.10.0: sections 9.2.2, 9.2.2.1, 9.2.2.1A, 14.5, figures 63 and 64	ISLD-201308-022 ISLD-201308-023 ISLD-201308-024 ISLD-201607-001 ISLD-201607-002	11 Jul 2005	
			EP1772030(DE)					11 Jul 2005
			EP1772030(ES)					11 Jul 2005
			EP1772030(FR)					11 Jul 2005
			EP1772030(GB)					11 Jul 2005
			EP1772030(IT)					11 Jul 2005
			IN271359					11 Jul 2005
			US10200511					11 Jul 2005
	US9237058					11 Jul 2005		
LTE035	3G Licensing	US7860073		1	3GPP TS 29.060 V8.3.0: section 3.1 3GPP TS 23.401 V8.10.0: sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, and 5.1.2.5-1 3GPP TS 29.061 V8.6.0: sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4, 11.2.1.3.1, 11.3, figures 11c, 11d, 11e, 11bb and 11ba 3GPP TS 23.060 V8.10.0: sections 9.2.2, 9.2.2.1, 9.2.2.1A, 14.5, figures 63 and 64	ISLD-201308-025 ISLD-201308-026 ISLD-201308-027 ISLD-201308-028 ISLD-201607-001 ISLD-201607-002	10 Jun 2005	

LTE035	3G Licensing	EP1771978		1	3GPP TS 29.060 V8.3.0: section 3.1 3GPP TS 23.401 V8.10.0: sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, and 5.1.2.5-1 3GPP TS 29.061 V8.6.0: sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4, 11.2.1.3.1, 11.3, figures 11c, 11d, 11e, 11bb and 11b 3GPP TS 23.060 V8.10.0: sections 9.2.2, 9.2.2.1, 9.2.2.1A, 14.5, figures 63 and 64	ISLD-201308-025 ISLD-201308-026 ISLD-201308-027 ISLD-201308-028 ISLD-201607-001 ISLD-201607-002	10 Jun 2005	
		CNZL200580024907.0		1	3GPP TS 29.060 V8.3.0: section 3.1 3GPP TS 23.401 V8.10.0: sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, and 5.1.2.5-1 3GPP TS 29.061 V8.6.0: sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4, 11.2.1.3.1, 11.3, figures 11c, 11d, 11e, 11bb and 11ba 3GPP TS 23.060 V8.10.0: sections 9.2.2, 9.2.2.1, 9.2.2.1A, 14.5, figures 63 and 64	ISLD-201308-025 ISLD-201308-026 ISLD-201308-027 ISLD-201308-028 ISLD-201607-001 ISLD-201607-002	10 Jun 2005	
			EP1771978(CH)					10 Jun 2005
			EP1771978(DE)					10 Jun 2005
			EP1771978(ES)					10 Jun 2005
			EP1771978(FR)					10 Jun 2005
			EP1771978(GB)					10 Jun 2005
		EP1771978(IT)				10 Jun 2005		
		IN272738				10 Jun 2005		
LTE036	3G Licensing	EP1741264		1	3GPP TS 29.060 V8.11.0 Sections 3.1, 4.1, Figure 1 3GPP TS 23.401 V8.8.0 Sections 5.1, 5.1.1.1, 5.1.1.4, Figure 5.1.1.4-1, 5.1.1.5, Figure 5.1.1.5-1, 5.1.1.6, Figure 5.1.1.6-1, 5.1.1.7, Figure 5.1.1.7-1, 5.1.1.8, Figure 5.1.1.8-1, 5.1.2.1, Figure 5.1.2.1-1, 5.1.2.2, Figure 5.1.2.2-1, 5.1.2.3, Figure 5.1.2.3-1, 5.1.2.4, Figure 5.1.2.4-1, 5.1.2.5, Figure 5.1.2.5-1 3GPP TS 23.402 V8.8.0 Sections 1, 4.2.2, Figure 4.2.2-2, 4.3.3.2, 4.3.3.3, 4.3.4, 5.1.2, 5.1.4.1, Figure 5.1.4-1, 5.1.4.2, Figure 5.1.4.2-1, 5.1.4.3, Figure 5.1.4.3-1, 5.1.4.4, Figure 5.1.4.4-1, 5.1.3.1, Figure 5.1.3.1-1, 6.1.2, Figure 6.1.2-1, Annex A, A.1, Figure A.1-1, Figure A.1-2, Figure A.1-3, A2, Figure A.2-1 3GPP TS 23.228 V8.9.0 Sections 4.6.0, 4.6.1, 5.4.2a, Figure 5.5b, E0, E5 3GPP TS 23.060 V8.7.0 Sections 4, 5.3.2.4, 5.3.2.5, 5.5, Table 1, 5.6.2.1, 5.6.2.2, Figure 6a, Figure 6b, Figure 6c, Figure 6d, 5.6.3, 5.6.3.1, Figure 7, 5.6.3.2, Figure 8, 9.2.1, 9.2.2.1, Figure 63, Figure 64	ISLD-201010-005 ISLD-201010-006 ISLD-201010-007 ISLD-201010-008 ISLD-201010-009 ISLD-201308-012 ISLD-201308-013 ISLD-201308-014 ISLD-201308-015 ISLD-201308-016 ISLD-201607-001 ISLD-201607-002	19 Apr 2005	
		CNZL200580020466.7		1	3GPP TS 29.060 V8.11.0: Sections 3.1, 4.1, Figure 1 3GPP TS 23.401 V8.8.0: Sections 5.1, 5.1.1.1, 5.1.1.4, Figure 5.1.1.4-1, 5.1.1.5, Figure 5.1.1.5-1, 5.1.1.6, Figure 5.1.1.6-1, 5.1.1.7, Figure 5.1.1.7-1, 5.1.1.8, Figure 5.1.1.8-1, 5.1.2.1, Figure 5.1.2.1-1, 5.1.2.2, Figure 5.1.2.2-1, 5.1.2.3, Figure 5.1.2.3-1, 5.1.2.4, Figure 5.1.2.4-1, 5.1.2.5, Figure 5.1.2.5-1 3GPP TS 23.402 V8.8.0: Sections 1, 4.2.2, Figure 4.2.2-2, 4.3.3.2, 4.3.3.3, 4.3.4, 5.1.2, 5.1.4.1, Figure 5.1.4-1, 5.1.4.2, Figure 5.1.4.2-1, 5.1.4.3, Figure 5.1.4.3-1, 5.1.4.4, Figure 5.1.4.4-1, 5.1.3.1, Figure 5.1.3.1-1, 6.1.2, Figure 6.1.2-1, Annex A, A.1, Figure A.1-1, Figure A.1-2, Figure A.1-3, A2, Figure A.2-1 3GPP TS 23.228 V8.9.0: Sections 4.6.0, 4.6.1, 5.4.2a, Figure 5.5b, E0, E5 3GPP TS 23.060 V8.7.0: Sections 4, 5.3.2.4, 5.3.2.5, 5.5, Table 1, 5.6.2.1, 5.6.2.2, Figure 6a, Figure 6b, Figure 6c, Figure 6d, 5.6.3, 5.6.3.1, Figure 7, 5.6.3.2, Figure 8, 9.2.1, 9.2.2.1, Figure 63, Figure 64	ISLD-201010-005 ISLD-201010-006 ISLD-201010-007 ISLD-201010-008 ISLD-201010-009 ISLD-201308-012 ISLD-201308-013 ISLD-201308-014 ISLD-201308-015 ISLD-201308-016 ISLD-201607-001 ISLD-201607-002	19 Apr 2005	
			EP1741264(DE)					19 Apr 2005
			EP1741264(ES)					19 Apr 2005
			EP1741264(FR)					19 Apr 2005
			EP1741264(GB)					19 Apr 2005
			EP1741264(IT)					19 Apr 2005
				IN255363				19 Apr 2005
				JP4660539				19 Apr 2005
				US7907618				19 Apr 2005

LTE037	3G Licensing	US7995523		1, 12	3GPP TS 23.401 V8.17.0: Sections 1, 4.2.1, 4.2.3, 4.7.1, 4.7.2.1, 4.7.2.2 and 5.4.5; Figures 4.2.1-1 and 5.4.5-1 3GPP TS 24.303 V8.9.0: Sections 1, 4.1, 5.1.1, 5.1.2.3 and 5.1.2.4 IETF RFC 6275: included by reference in TS 24.303 V8.9.0: Abstract, Sections 10.4.1, 10.4.2 and 11.7.1	ISLD-201511-018 ISLD-201607-001	24 Sep 2003	
			CNZL03822788.6					24 Sep 2003
			EP1543666(DE)					24 Sep 2003
			EP1543666(ES)					24 Sep 2003
			EP1543666(FR)					24 Sep 2003
			EP1543666(GB)					24 Sep 2003
			EP1543666(IT)					24 Sep 2003
			EP1667384(DE)					24 Sep 2003
			EP1667384(ES)					24 Sep 2003
			EP1667384(FR)					24 Sep 2003
			EP1667384(GB)					24 Sep 2003
			EP1667384(IT)					24 Sep 2003
			JP4426451					24 Sep 2003
			JP4834133					24 Sep 2003
US8611296					24 Sep 2003			
US9949238					24 Sep 2003			
LTE039	3G Licensing	JP5248586		1	3GPP TS 23.401 V8.10.0: Section 4.2.2, and Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2 and 9.2.2.1, and Figures 63 and 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4, and Figure 10.5.137, and Table 10.5.155 3GPP TS 29.061 V8.7.0: Section 11.2.1.4, and Figures 11c, 11d, and 11e 3GPP TS 23.228 V8.12.0: Section 3.1, and Annex I.1, I.2, I.3, I.3.1, and I.3.1.2, and Figures I.1 and I.3 IETF RFC 3344: 2002-08: included by reference in TS 29.061: Sections 1.5, 1.7 and 3	ISLD-201109-013 ISLD-201109-014 ISLD-201109-015 ISLD-201109-016 ISLD-201109-017 ISLD-201308-007 ISLD-201308-008 ISLD-201308-009 ISLD-201308-010 ISLD-201607-001 ISLD-201607-002	10 Mar 2004	
			IN227148		1	3GPP TS 23.401 V8.10.0: Section 4.2.2, and Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2 and 9.2.2.1, and Figures 63 and 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4, and Figure 10.5.137, and Table 10.5.155 3GPP TS 29.061 V8.7.0: Section 11.2.1.4, and Figures 11c, 11d, and 11e 3GPP TS 23.228 V8.12.0: Section 3.1, and Annex I.1, I.2, I.3, I.3.1, and I.3.1.2, and Figures I.1 and I.3 IETF RFC 3344: 2002-08: included by reference in TS 29.061: Sections 1.5, 1.7 and 3		10 Mar 2004
			EP1602215		1	3GPP TS 23.401 V8.10.0: Section 4.2.2, and Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2 and 9.2.2.1, and Figures 63 and 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4, and Figure 10.5.137, and Table 10.5.155 3GPP TS 29.061 V8.7.0: Section 11.2.1.4, and Figures 11c, 11d, and 11e 3GPP TS 23.228 V8.12.0: Section 3.1, and Annex I.1, I.2, I.3, I.3.1, and I.3.1.2, and Figures I.1 and I.3 IETF RFC 3344: 2002-08: included by reference in TS 29.061: Sections 1.5, 1.7 and 3	ISLD-201109-013 ISLD-201109-014 ISLD-201109-015 ISLD-201109-016 ISLD-201109-017 ISLD-201308-007 ISLD-201308-008 ISLD-201308-009 ISLD-201308-010 ISLD-201607-001 ISLD-201607-002	10 Mar 2004

LTE039	3G Licensing	CNZL200480006637.6		1	3GPP TS 23.401 V8.10.0: Section 4.2.2, and Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2 and 9.2.2.1, and Figures 63 and 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4, and Figure 10.5.137, and Table 10.5.155 3GPP TS 29.061 V8.7.0: Section 11.2.1.4, and Figures 11c, 11d, and 11e 3GPP TS 23.228 V8.12.0: Section 3.1, and Annex I.1, I.2, I.3, I.3.1, and I.3.1.2, and Figures I.1 and I.3 IETF RFC 3344: 2002-08: included by reference in TS 29.061: Sections 1.5, 1.7 and 3	ISLD-201109-013 ISLD-201109-014 ISLD-201109-015 ISLD-201109-016 ISLD-201109-017 ISLD-201308-007 ISLD-201308-008 ISLD-201308-009 ISLD-201308-010 ISLD-201607-001 ISLD-201607-002	10 Mar 2004
			EP1602215(DE)				10 Mar 2004
			EP1602215(FR)				10 Mar 2004
			EP1602215(GB)				10 Mar 2004
			KR101007005				10 Mar 2004
			US7640017				10 Mar 2004
US8023946				10 Mar 2004			
LTE041	3G Licensing	EP1838044		20	3GPP TS 23.327 V8.4.0: Sections 1, 3.2, 4.2, 5, 5.2.1, 5.3.1, 5.3.2, 5.4, 5.5, 6.1, 6.3.1 and 6.3.2.2; Figures 5.2.1-1, 6.1, 6.3.1-1 and 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 2, 3.2, 5.7.1, 5.13.1, 5.13.2, 6.1.1, 6.2.1, 6.2.5, 6.2.6 and H.4; Figure 6.1 3GPP TS 23.107 V8.2.0: Section 6.3	ISLD-201308-032 ISLD-201308-033 ISLD-201308-034 ISLD-201607-001 ISLD-201607-002	24 Mar 2006
			CNZL200780010663.X		20	3GPP TS 23.327 V8.4.0: Sections 1, 3.2, 4.2, 5, 5.2.1, 5.3.1, 5.3.2, 5.4, 5.5, 6.1, 6.3.1 and 6.3.2.2; Figures 5.2.1-1, 6.1, 6.3.1-1 and 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 2, 3.2, 5.7.1, 5.13.1, 5.13.2, 6.1.1, 6.2.1, 6.2.5, 6.2.6 and H.4; Figure 6.1 3GPP TS 23.107 V8.2.0: Section 6.3	ISLD-201308-032 ISLD-201308-033 ISLD-201308-034 ISLD-201607-001 ISLD-201607-002
		EP1838044(DE)				24 Mar 2006	
		EP1838044(ES)				24 Mar 2006	
		EP1838044(FR)				24 Mar 2006	
		EP1838044(GB)				24 Mar 2006	
		EP1838044(IT)				24 Mar 2006	
		JP5809648				24 Mar 2006	
		JP6063998				24 Mar 2006	
		US9413681				24 Mar 2006	
LTE042	3G Licensing	US8184646		18	3GPP TS 23.401 V8.18.0, Section 3.1, 4.3.3, 4.3.3.1, 4.3.5, 4.3.5.1, 4.3.5.2, 4.7, 4.7.1, 5.1.2, 5.1.2.1, 5.3.2 and 5.3.2.1, Figure 5.1.2.1-1 3GPP TS 24.301 V8.10.0, Section 4.2, 8.3.8, 8.3.8.1, 9.9.4.3 and 9.9.4.3, Figure 9.9.4.3.1, Table 8.3.8.1 3GPP TS 23.002 V8.6.0, Section 3.1, 4.1.4, 4.1.4.1, 4.1.4.2, 4.1.4.2.1 and 4.1.4.2.2 3GPP TS 23.203 V8.14.0, Section 3.1, 6.1.7 and 6.1.7.2	ISLD-201211-019 ISLD-201211-020 ISLD-201211-021 ISLD-201607-001 ISLD-201607-002	19 Mar 2007
			EP1999907(DE)				19 Mar 2007
			EP1999907(ES)				19 Mar 2007
			EP1999907(FR)				19 Mar 2007
			EP1999907(GB)				19 Mar 2007
			EP1999907(IT)				19 Mar 2007
			EP1999907(NL)				19 Mar 2007
			IN282457				19 Mar 2007
			JP5740672				19 Mar 2007
			US9166824				19 Mar 2007

LTE044	3G Licensing	US6856818		18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1 and 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1 and 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2; Figure 8.2, 8.4 and K.1 ; Tables 8.1 and 11.11	ISLD-201011-001 ISLD-201011-002 ISLD-201011-003 ISLD-201011-004	19 Jan 1998	
		JP4357596		18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1 and 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1 and 5.3.29 ; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 3GPP TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2; Figure 8.2, 8.4 and K.1 ; Table 8.1 and 11.11	ISLD-201011-001 ISLD-201011-002 ISLD-201011-003 ISLD-201011-004	19 Jan 1998	
		IN208486		18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1 and 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1 and 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2; Figure 8.2, 8.4 and K.1 ; Tables 8.1 and 11.11	ISLD-201011-001 ISLD-201011-002 ISLD-201011-003 ISLD-201011-004	19 Jan 1998	
		EP0960542		18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1, 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1 and 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1	ISLD-201011-001 ISLD-201011-002 ISLD-201011-003 ISLD-201011-004	19 Jan 1998	
		CNZL98802464.0		18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1 and 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1 and 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2; Figure 8.2, 8.4 and K.1 ; Tables 8.1 and 11.11	ISLD-201011-001 ISLD-201011-002 ISLD-201011-003 ISLD-201011-004	19 Jan 1998	
		CA2280150		18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1 and 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1 and 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2; Figure 8.2, 8.4 and K.1 ; Tables 8.1 and 11.11	ISLD-201011-001 ISLD-201011-002 ISLD-201011-003 ISLD-201011-004	19 Jan 1998	
		AU729163		18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1 and 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1 and 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2; Figure 8.2, 8.4 and K.1 ; Tables 8.1 and 11.11	ISLD-201011-001 ISLD-201011-002 ISLD-201011-003 ISLD-201011-004	19 Jan 1998	
			EP0960542(DE)					19 Jan 1998
			EP0960542(ES)					19 Jan 1998
	EP0960542(FR)					19 Jan 1998		
	EP0960542(GB)					19 Jan 1998		
	EP0960542(IT)					19 Jan 1998		
	GB2322045					11 Feb 1997		
LTE045	3G Licensing	US7102663		1	3GPP TS 23.060 V8.9.0 Sections 5.1, Figure 1, 5.3.8 and Figure 72b. 3GPP TS 23.228 V8.12.0 Sections 4.0, 4.16.1, 4.16.2, 5.4.4. Annex E, E.0, E.2.1a.1, E.2.1a.2, E.2.4.0, E.2.4.1, Figure E 3GPP TS 23.401 V8.17.0 Sections 4.7.1, 4.7.2.2, and Figure 4.7.2.2-1	ISLD-201308-029 ISLD-201308-030 ISLD-201308-031 ISLD-201607-001 ISLD-201607-002	16 Oct 2001	
		CNZL200510097414.1		8	3GPP TS 22.279 V7.1.0: Sections 1, 2, 3.1, 6 and 8 3GPP TS 23.279 V7.7.0: Sections 8.1, 8.3.1 and 8.3.2; Figures 8-1, 8.3-1 and 8.3-2 3GPP TS 23.228 V7.16.0: Sections 4.13.2 and 4.13.3; Figure 4.13-1 3GPP TS 24.173 V9.1.0: Sections 4.2, 5.1 and 5.2 3GPP TS 24.229 V7.28.0: Sections 5.1, 5.1.2A.1, 6.1.2, 6.1.3, 7.9.2, 7.2A.8.1, 7.2A.8.2, 7.2A.9.1, 7.2A.9.2, 7.9.2 and 7.9.3 3GPP TS 24.279 V7.7.0: Sections 6.3.1.8, 6.3.1.9, 7.3.1.3, 7.3.1.4, A.1, A.2, A.3, 7.3.1.8 and 7.3.1	ISLD-201308-029 ISLD-201308-030 ISLD-201308-031 ISLD-201607-001 ISLD-201607-002	16 Oct 2001	

LTE045	3G Licensing	CNZL01818343.3		1	3GPP TS 23.060 V8.9.0 Sections 5.1, Figure 1, 5.3.8 and Figure 72b. 3GPP TS 23.228 V8.12.0 Sections 4.0, 4.16.1, 4.16.2, 5.4.4. Annex E, E.0, E.2.1a.1, E.2.1a.2, E.2.4.0, E.2.4.1, Figure E 3GPP TS 23.401 V8.17.0 Sections 4.7.1, 4.7.2.2, and Figure 4.7.2.2-1	ISLD-201308-029 ISLD-201308-030 ISLD-201308-031 ISLD-201607-001 ISLD-201607-002	16 Oct 2001		
			EP1921855				16 Oct 2001		
			EP1921855(DE)				16 Oct 2001		
			EP1921855(ES)				16 Oct 2001		
			EP1921855(FR)				16 Oct 2001		
			EP1921855(GB)				16 Oct 2001		
			EP1921855(IE)				16 Oct 2001		
			EP1921855(IT)				16 Oct 2001		
			EP1921855(LU)				16 Oct 2001		
			EP1921855(NL)				16 Oct 2001		
EP1921855(TR)				16 Oct 2001					
			US7995091				16 Oct 2001		
LTE049	Sisvel International	EP0852885		12	3GPP TS23.401V8.18.0: Sections 4.7, 4.7.1, 4.7.2, 4.7.2.1, 5.4, 5.4.1, 5.7, 5.7.1; Tables 5.4.1-1, 5.7.1-1	ISLD-201106-009 ISLD-201305-003	25 Sep 1996		
			AU715225				25 Sep 1996		
			CA2232792				25 Sep 1996		
			CNZL96197188.6				25 Sep 1996		
			EP0852885(AT)				25 Sep 1996		
			EP0852885(BE)				25 Sep 1996		
			EP0852885(DE)				25 Sep 1996		
			EP0852885(ES)				25 Sep 1996		
			EP0852885(FR)				25 Sep 1996		
			EP0852885(GB)				25 Sep 1996		
			EP0852885(GR)				25 Sep 1996		
			EP0852885(IE)				25 Sep 1996		
			EP0852885(IT)				25 Sep 1996		
			EP0852885(NL)				25 Sep 1996		
			HK1016698				25 Sep 1996		
			NO325994				25 Sep 1996		
NZ318789				25 Sep 1996					
US6646998				25 Sep 1996					
LTE050	Sisvel International	US7957736		9	3GPP TS 23.003 v 8.17.0 : Sections 2.8.1 3GPP TS 23.401 v 8.18.0: Sections 5.3.2.1 3GPP TS 24.301 v 8.10.0: Sections 5.4.1.2, 8.2.4.1; Table 8.2.4.1	ISLD-201305-003	05 Oct 1999		
			EP1119997		15	3GPP TS 23.003 V8.17.0: Sections 2.1, 2.8, 2.8.1 3GPP TS 23.401 V8.18.0: Section 5.3.7; Figure 5.3.7-1	ISLD-201305-003	05 Oct 1999	
				CNZL99811826.5					05 Oct 1999
				EP1119997(AT)					05 Oct 1999
				EP1119997(BE)					05 Oct 1999
				EP1119997(DE)					05 Oct 1999
				EP1119997(ES)					05 Oct 1999
				EP1119997(FR)					05 Oct 1999
				EP1119997(GB)					05 Oct 1999
				EP1119997(IT)					05 Oct 1999
				EP1119997(NL)					05 Oct 1999
				EP1119997(PT)					05 Oct 1999
				EP1119997(SE)					05 Oct 1999
				FI106288					06 Oct 1998

LTE050	Sisvel International		JP4226786				05 Oct 1999	
LTE051	Sisvel International	US7580714		1	3GPP TS 23.401 V8.18.0: Sections 5.3.2, 5.3.2.1, 5.3.5.1; Figures 5.3.2.1-1, 5.3.5.1-1	ISLD-200812-008 ISLD-201804-019	13 Oct 2000	
		EP2139272		1	3GPP TS 23.401 V8.18.0: Sections 5.3.2, 5.3.2.1; Table 5.3.2.1-1	ISLD-200812-008 ISLD-201804-019	13 Oct 2000	
			EP2139272(AT)					13 Oct 2000
			EP2139272(BE)					13 Oct 2000
			EP2139272(CH)					13 Oct 2000
			EP2139272(DE)					13 Oct 2000
			EP2139272(DK)					13 Oct 2000
			EP2139272(ES)					13 Oct 2000
			EP2139272(FI)					13 Oct 2000
			EP2139272(FR)					13 Oct 2000
			EP2139272(GB)					13 Oct 2000
			EP2139272(GR)					13 Oct 2000
			EP2139272(IE)					13 Oct 2000
			EP2139272(IT)					13 Oct 2000
			EP2139272(LI)					13 Oct 2000
			EP2139272(LU)					13 Oct 2000
			EP2139272(NL)					13 Oct 2000
			EP2139272(PT)					13 Oct 2000
	EP2139272(SE)					13 Oct 2000		
	HK1132411					13 Oct 2000		
	US7035621					13 Oct 2000		
	US7979070					13 Oct 2000		
	US9008615					13 Oct 2000		
LTE052	Sisvel International	US7283499		1	3GPP TS 36.201 V8.3.0: Sections 4.1.2, 4.2.1 3GPP TS 36.212 V8.8.0: Sections 4.2, 5, 5.3.2; Figure 5.3.2-1 3GPP TS 36.213 V8.8.0: Sections 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4; Table: 7.2.3-1	ISLD-200811-005 ISLD-201305-003	15 Oct 2004	
		EP1807956		1	3GPP TS 36.201 V8.3.0: Sections 4.2.1 3GPP TS 36.212 V8.8.0: 5.2, 5.2.1, 5.2.2, 5.2.2.6 3GPP TS 36.213 V8.8.0: 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4; Tables 7.2.1-1, 7.2.2-1, 7.2.3-0, 7.2.3-1	ISLD-200811-005 ISLD-201305-003	13 Oct 2005	
			EP1807956(AT)					13 Oct 2005
			EP1807956(BE)					13 Oct 2005
			EP1807956(CH)					13 Oct 2005
			EP1807956(CZ)					13 Oct 2005
			EP1807956(DE)					13 Oct 2005
			EP1807956(DK)					13 Oct 2005
			EP1807956(ES)					13 Oct 2005
			EP1807956(FI)					13 Oct 2005
			EP1807956(FR)					13 Oct 2005
			EP1807956(GB)					13 Oct 2005
			EP1807956(HU)					13 Oct 2005
			EP1807956(IE)					13 Oct 2005
			EP1807956(IT)					13 Oct 2005
			EP1807956(LI)					13 Oct 2005
			EP1807956(LU)					13 Oct 2005
			EP1807956(NL)					13 Oct 2005
	EP1807956(PL)					13 Oct 2005		
	EP1807956(PT)					13 Oct 2005		
	EP1807956(RO)					13 Oct 2005		
	EP1807956(SE)					13 Oct 2005		
	EP1807956(SK)					13 Oct 2005		

LTE052	Sisvel International		EP1807956(TR)				13 Oct 2005	
			GR3083727				13 Oct 2005	
			US8031678				13 Oct 2005	
LTE054	Sisvel International	US7599384		17	3GPP TS 24.301 V8.10.0: Sections 4.2, 6.1.1, 6.4.1.1, 6.4.3.1, 6.4.3.2, 6.4.3.3, 6.4.3.4, 6.5.3.1, 8.3.18.1, 9.3.2, 9.9.4.3; Figure 6.4.3.2.1; Tables 8.3.18.1	ISLD-201305-003	31 Aug 1998	
		JP4002731		1	3GPP TS 23.401 V8.18.0: Sections 4.2.1	ISLD-201305-003	31 Aug 1998	
		EP1051870		18	3GPP TS 24.301 V8.10.0: Sections 6.4.2.2, 6.4.2.3, 6.4.3.2, 6.4.3.3, 8.3.18.1, 9.3.2, 9.9.4.3	ISLD-201305-003	31 Aug 1998	
			CA2318480					31 Aug 1998
			CNZL200610005844.0					31 Aug 1998
			EP1051870(DE)					31 Aug 1998
			EP1051870(ES)					31 Aug 1998
			EP1051870(FR)					29 Jan 1998
			EP1051870(GB)					29 Jan 1998
			EP1051870(IT)					29 Jan 1998
			EP1051870(NL)					31 Aug 1998
			FI106172					29 Jan 1998
	US6826406					31 Aug 1998		
LTE057	Sisvel International	US7894443		16	3GPP TS 36.322 v10.0.0: Sections 4.1, 4.2.1, 6.2, 6.2.1.1, 6.2.1.3, 6.2.1.4, 6.2.1.5, 6.2.2.1, 6.2.2.2, 6.2.2.5, 6.2.2.6; Figures 4.2.1-1, 6.2.1.3-3, 6.2.1.3-4, 6.2.1.3-5, 6.2.1.3-6, 6.2.1.4-2, 6.2.1.4-3, 6.2.1.5-1, 6.2.1.5-2, 6.2.1.5-3; Table 6.2.2.6-1	ISLD-200806-005 ISLD-201305-003 ISLD-201906-013	22 Aug 2006	
			CNZL200680038765.8				22 Aug 2006	
			EP1925142(AT)					22 Aug 2006
			EP1925142(BE)					22 Aug 2006
			EP1925142(CH)					22 Aug 2006
			EP1925142(CZ)					22 Aug 2006
			EP1925142(DE)					22 Aug 2006
			EP1925142(ES)					22 Aug 2006
			EP1925142(FR)					22 Aug 2006
			EP1925142(GB)					22 Aug 2006
			EP1925142(IE)					22 Aug 2006
			EP1925142(IT)					22 Aug 2006
			EP1925142(LU)					22 Aug 2006
			EP1925142(NL)					22 Aug 2006
			EP1925142(PL)					22 Aug 2006
			EP1925142(PT)					22 Aug 2006
			EP1925142(RO)					22 Aug 2006
			EP1925142(SE)					22 Aug 2006
			EP1925142(TR)					22 Aug 2006
			IN318570					22 Aug 2006
	JP4875084					22 Aug 2006		
	KR100950843					22 Aug 2006		
	PK140975					22 Aug 2006		
	PK140978					22 Aug 2006		

LTE058	KPN	EP0716796		1, 3	3GPP TS 23.261 V10.2.0: Sections 4, 4.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.2, 5.3.3 3GPP TS 23.401 V10.4.0: Sections 1, 5, 5.1, 5.1.1, 5.1.1.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.1.1, 5.3.2, 5.3.2.1, 5.10, 5.10.1, 5.10.2 3GPP TS 23.402 V10.4.0: Sections 7.3 3GPP TS 23.234 V11.1.0: Sections 6, 6.1 3GPP TS 23.003 V10.3.0: Sections 2, 2.1 IETF RFC 4306: Sections 1.2 Claim 3: same as Claim 3: 3GPP TS 23.261 V10.2.0: Sections 4, 4.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.2, 5.3.3 3GPP TS 23.401 V10.4.0: Sections 1, 5, 5.1, 5.1.1, 5.1.1.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.1.1, 5.3.2, 5.3.2.1, 5.10, 5.10.1, 5.10.2 3GPP TS 23.402 V10.4.0: Sections 7.3 3GPP TS 23.234 V11.1.0: Sections 6, 6.1 3GPP TS 23.003 V10.3.0: Sections 2, 2.1 IETF RFC 4306: Sections 1.2	ISLD-201203-015	31 Aug 1994
				EP0716796(DE)		31 Aug 1994	
				EP0716796(FR)		31 Aug 1994	
				EP0716796(GB)		31 Aug 1994	
				EP0716796(NL)		31 Aug 1994	
				EP0716796(SE)		31 Aug 1994	
		US5960365			31 Aug 1994		
LTE059	3G Licensing	EP1869841		1	3GPP TS 23.060 V8.7.0: sections 9.2.1A; 9.2.1.1; 9.2.2.1; 9.2.2.1.1; 15.3.0; 15.3.1; Figures 63; 64 3GPP TS 23.207 V8.0.0: sections 4.2; 4.7; 5.1; 5.2; 5.2.1; 5.2.2; 6.1; 6.1.1; 6.1.2; 6.4; Figures; Annex A: A.2; A.2.5; Annex C; Figure A.7 3GPP TS 23.228 V8.12.0: sections 4.0; 4.2.4; 4.2.4a; 4.6.0; 4.6.1; 4.6.3; 5.4.0; 5.4.2a; Figures 4.0; 5.5b; Annex E: E.0; E.5 3GPP TS 23.401 V8.8.0: sections 1; 4.2.1; 4.2.2; 4.4.4; Figures 4.2.1-1; 4.2.1-2; 4.2.2-1; 4.2.2-2, 4.2.2-3 3GPP TS 24.008 V9.3.0: sections 9.5.4; 9.5.4.1; 10.5.6.12; tables 9.5.4; 10.5.162 3GPP TS 24.229 V8.11.0: Annex B: B.1; B.2.1; B.2.2.1; B.2.2.5.1; B.2.2.5.1A; B.2.2.5.1B 3GPP TS 29.060 V9.3.0: section 7.7.36	ISLD-201011-005 ISLD-201011-006 ISLD-201011-007 ISLD-201011-008 ISLD-201011-009 ISLD-201011-010 ISLD-201308-017 ISLD-201308-018 ISLD-201308-019 ISLD-201308-020 ISLD-201308-021 ISLD-201607-001 ISLD-201607-002	22 Mar 2006
				EP1869841(DE)		22 Mar 2006	
				EP1869841(FR)		22 Mar 2006	
				EP1869841(GB)		22 Mar 2006	
LTE063	3G Licensing	US7933564		1	3GPP TS 36.211 V10.7.0: Sections 6.3, 6.3.2, 6.3.3, 6.3.3.3, 6.3.4, 6.3.4.3; Figure 6.3-1; Table 6.3.3.3-1	ISLD-201607-001	02 Dec 2004
			EP1690361	12	3GPP TS 36.211 v10.7.0: Sections 6.3, 6.3.3, 6.3.4.3	ISLD-201607-001	02 Dec 2004
			EP1690361(DE)		02 Dec 2004		
			EP1690361(FR)		02 Dec 2004		
			EP1690361(GB)		02 Dec 2004		
			JP4845738		02 Dec 2004		
	KR101092537		02 Dec 2004				
LTE064	KPN	US9667669		1, 15, 16	3GPP TS 24.371 V12.6.0: Sections 1, 2, 4, 4.1, 5D.1, 5D.2, 7.1 3GPP TS 23.228 V12.0.0: Sections 4.6.1; Annex U.1.2, U.1.3.1U.1.3.3, U.2.2	ISLD-201603-006 ISLD-201911-024	19 Jan 2010
		JP5436577		17	3GPP TS 23.228 v12.4.0: Annex U.1.0, U.1.2, U.2.2, Fig. U.1.2-1 3GPP TS 24.371 v12.9.0: Sections 1, 2, 4.1 5D.1, 5D.2 and 7.1	ISLD-201603-006 ISLD-201911-024	19 Jan 2010
		CNZL201080013541.8		12, 13, 14	3GPP TS 23.228 V12.10.0: Sections U.1.0, U.1.2, U.1.3.1 and U.2.2, Figure U.1.2-1 3GPP TS 23.371 V12.4.0: Sections 1, 2, 4.1, 5D.1, 5D.2 and 7.1	ISLD-201603-006 ISLD-201911-024	19 Jan 2010

LTE064	KPN		KR101287322				19 Jan 2010	
LTE065	3G Licensing	EP2597926		9	3GPP TS 23.401 V8.15.0: Sections 4.3.2.2,4.7.5, 5.3.2.1, Fig. 5.3.2.1-1, 5.4.1, and Fig.5.4.1-1 3GPP TS 23.203 V8.14.0: Sections 3.1, 4.1,and 5.2.2 3GPP TS 29.212 V8.15.0: Section 4.5.1	ISLD-201511-021 ISLD-201511-022 ISLD-201511-023 ISLD-201607-001 ISLD-201607-002	09 Oct 2008	
			EP2597926(AT)					09 Oct 2008
			EP2597926(BE)					09 Oct 2008
			EP2597926(CH)					09 Oct 2008
			EP2597926(DE)					09 Oct 2008
			EP2597926(ES)					09 Oct 2008
			EP2597926(FR)					09 Oct 2008
			EP2597926(GB)					09 Oct 2008
			EP2597926(IE)					09 Oct 2008
			EP2597926(IT)					09 Oct 2008
			EP2597926(NL)					09 Oct 2008
			EP2597926(PL)					09 Oct 2008
			EP2597926(PT)					09 Oct 2008
			EP2597926(RO)					09 Oct 2008
			EP2597926(SE)					09 Oct 2008
EP2597926(TR)					09 Oct 2008			
US8781469						09 Oct 2008		
US9319976						09 Oct 2008		
LTE071	KPN	EP0785692		1	3GPP TS 23.261 V10.2.0: Sections 5.3.1, 5.4.1 and 5.4.2; Figure 5.4.2-1 3GPP TS 24.312 V10.7.0: Section 4.1.1 3GPP TS 36.304 V10.8.0: Section 7.1 3GPP TS 23.401 v10.13.0: Section 5.13	ISLD-201507-025	29 Oct 1996	
			EP0785692(DE)					29 Oct 1996
			EP0785692(ES)					29 Oct 1996
			EP0785692(FR)					29 Oct 1996
			EP0785692(GB)					29 Oct 1996
			EP0785692(NL)					29 Oct 1996
			EP0785692(SE)					29 Oct 1996
NL1001561						29 Oct 1996		
LTE072	Orange	EP1362447		1	3GPP TS 36.300 V11.10.0: Sections 3, 3.2, 5, 5.1, 5.1.5 3GPP TS 36.212 V10.8.0: Sections 4, 4.2, 5, 5.1, 5.1.3, 5.1.4, 5.1.4.1, 5.1.5, 5.3, 5.3.2, 5.3.2.3, 5.3.2.4, 5.3.2.5 3GPP TS 36.211 V10.7.0: Sections 3, 3.1, 6, 6.1, 6.1.1, 6.2, 6.2.1, 6.2.2, 6.3, 6.3.1, 6.3.2, 6.3.3, 6.3.3.2, 6.3.4, 6.3.4.2, 6.3.4.2.1, 6.3.4.2.2, 6.3.4.2.3, 6.3.5, 6.4 3GPP TS 36.201 V10.0.0: Sections 4, 4.2, 4.2.3		14 Feb 2002	
			CNZL02806429.1		1	3GPP TS 36.201 V10.0.0: Sections 4.2.1, 4.2.3 3GPP TS 36.211 V10.7.0: Sections 3.1, 5.1.1, 5.2.1, 5.3, 5.3.1, 5.3.2, 5.3.2A, 5.3.2A.2, 5.3, 5.3.3, 5.3.3A, 5.3.3A2, 5.3.4; Figures 5.2.1-1, 5.3-1; Table 5.3.2-1 3GPP TS 36.212 V10.8.0: Sections 5, 5.1, 5.1.3, 5.1.3.2.1, 5.1.4.1, 5.1.5, 5.2.2, 5.2.2.4, 5.2.2.5; Figures: 5.1.4-1, 5.2.2-1; Table 5.1.3-1 3GPP TS 36.300 V10.11.0: Sections 3.2, 5.2.6		14 Feb 2002
			EP1362447(BE)					14 Feb 2002
		EP1362447(CH)					14 Feb 2002	
		EP1362447(DE)					14 Feb 2002	
		EP1362447(ES)					14 Feb 2002	
		EP1362447(FR)					14 Feb 2002	
		EP1362447(GB)					14 Feb 2002	

LTE072	Orange		EP1362447(IT)				14 Feb 2002	
			EP1362447(LI)				14 Feb 2002	
			EP1362447(LU)				14 Feb 2002	
			EP1362447(MC)				14 Feb 2002	
			JP4184798				14 Feb 2002	
			KR100874059				14 Feb 2002	
			US7170948				14 Feb 2002	
LTE075	MELCO	JP4810578		3	3GPP TS 36.211 3GPP TS 36.212 3GPP TS 36.213 3GPP TS 36.321	ISLD-202006-006	09 Jan 2009	
				CNZL200480021840.0				29 Jul 2004
				CNZL200910175853.8				23 Sep 2009
				CNZL200910175854.2				23 Sep 2009
			EP2194660(DE)				24 Mar 2010	
			EP2194660(FR)				24 Mar 2010	
			KR100926289				29 Jul 2004	
			KR100951330				01 Apr 2009	
			KR100951332				01 Apr 2009	
			US8125963				29 Jul 2004	
			US8385295				09 Feb 2012	
LTE076	MELCO		JP4097129				08 Aug 2002	
			JP4772838				01 Aug 2008	
			JP5037305				09 Nov 2007	
LTE077	MELCO	US9635656		3	3GPP TS 36.213 V9.0.1: Sections 7.2, 7.2.2 3GPP TS 36.201 V9.0.0: Section 5.5 3GPP TS 36.321 V9.1.0: Section 5.4.4	ISLD-202006-006	27 Dec 2006	
				JP5160667	3	3GPP TS 36.213 V9.0.1: Sections 7.2, 7.2.2	ISLD-202006-006	02 Jun 2011
				CNZL201510125007.0	3	3GPP TS 36.321 V9.1.0: Sections 4.2.1, 4.3.1, 4.3.2, 4.4, 5.4.4	ISLD-202006-006	20 Mar 2015
			CNZL200680049892.8				27 Dec 2006	
			CNZL201510125199.5				20 Mar 2015	
			IN263874				27 Dec 2006	
	JP4819129				27 Dec 2006			
	US10165558				16 Mar 2017			
LTE078	MELCO		CNZL200780053418.7				27 Dec 2007	
			EP3125451(DE)				16 Sep 2016	
			EP3125451(FR)				16 Sep 2016	
			EP3125451(GB)				16 Sep 2016	
			JP4948601				27 Dec 2007	
			JP5111568				29 Jun 2010	
			US8249635				27 Dec 2007	
			US8412248				17 May 2012	
LTE079	MELCO	JP4841630		2	3GPP TS 36.213 V9.0.1: Sections 7.2, 10.1	ISLD-202006-006	30 Jul 2014	
				EP3125443	1	3GPP TS35.213 V9.0.1: Sections 7, 7.2, 7.2.1, 7.2.2, 10.1	ISLD-202006-006	09 Sep 2016
				CNZL201210065257.6	2	3GPP TS 36.213 V9.0.1: Sections 7.2, 7.2.3, 7.3, 10.1	ISLD-202006-006	05 Mar 2012
			EP2031775(DE)				27 Apr 2007	
			EP2031775(FR)				27 Apr 2007	
			EP2031775(GB)				27 Apr 2007	
			EP3125443(DE)				09 Sep 2016	
			EP3125443(FR)				09 Sep 2016	

LTE079	MELCO		EP3125443(GB)			09 Sep 2016	
			IN262788			27 Apr 2007	
			JP5289531			04 Oct 2011	
			KR101213062			27 Apr 2007	
			US8149749			27 Apr 2007	
LTE080	MELCO	JP4637848		3GPP TS 36.321 V10.4.0 Section 5.4.3.2, 5.4.5, 6.1.2, 6.1.3.1	ISLD-202006-006	08 Sep 2004	
			CNZL201210178008.8			29 May 2012	
			EP2654360			19 May 2013	
			US10404436			18 Jul 2019	
			US8149765			08 Sep 2004	
		US8675546			07 Feb 2012		
LTE081	MELCO		JP4902592			09 May 2008	
			JP5037706			11 Mar 2011	
LTE082	MELCO	US9113445	1	3GPP TS 36.300 V10.6.0: Sections 6, 6.1, 6.1.2, 11.3; Figure 6-2 3GPP TS 36.306 V10.4.0: Sections 4, 4.1, 4.2.5; Table 4.1-3 3GPP TS 36.321 V10.4.0: Sections 5.4.3.1, 5.4.3.2, 5.4.5, 6.1.2, 6.1.3.1; Figure 6.1.2-3; Tables 6.1.3.1-1, 6.1.3.1-2 3GPP TS 36.322 V10.0.0: Sections 4.2.1, 4.2.1.1.1, 4.2.1.2.1, 4.2.1.3.1, 4.5; Figures 4.2.1-1, 4.2.1.1.1-1, 4.2.1.2.1-1, 4.2.1.3.1-1 3GPP TS 36.331 V10.6.0: Sections 5.6.3.1, 5.6.3.3, 6.3.6; Figure 5.6.3.1-1	ISLD-202006-006	30 Apr 2004	
			CNZL200480042891.1				30 Apr 2004
			CNZL201010534929.4				25 Oct 2010
			CNZL201010534930.7				25 Oct 2010
			JP4763085				20 Jul 2010
	JP5026577				02 Dec 2010		
	US8583156				30 Apr 2004		
LTE083	MELCO		AU2011201566			06 Apr 2011	
			AU2014204428			15 Jul 2014	
			CNZL200880000038.1			01 Feb 2008	
			IN268040			01 Feb 2008	
			JP5550697			12 Oct 2012	
			KR101359411			11 Aug 2010	
			KR101473229			26 Aug 2013	
			KR101796712			16 May 2014	
			KR101898932			31 Oct 2017	
			RU2432716			01 Feb 2008	
RU2476027			22 Jun 2011				
LTE084	MELCO	US9713068	3	3GPP TS 24.301 V11.0.0: Sections 3.1, 3.2, 5.1.1, 5.1.3.2.2.4, 5.3.5, 5.5.3.1, 5.5.3.2.1, 5.5.3.2.2 3GPP TS 23.401 V11.0.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.2, 4.3.5.2, 4.3.5.3, 5.3.3, 5.3.3.0, 5.3.3.2, 5.3.3.2.4; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.2-3, 5.3.3.2-1 3GPP TS 36.300 V11.0.0: Sections 4, 4.1, ; Figure 4-1	ISLD-202006-006	26 Oct 2009	
		JP5538802	3	3GPP TS 23.401 V11.0.0: Sections 4.3.13, 5.3.3, 5.7.2	ISLD-202006-006	02 Oct 2009	
			AU2014201266				07 Mar 2014
			AU2015252029				03 Nov 2015
			AU2017202066				29 Mar 2017
			CNZL200980143951.1				26 Oct 2009
			CNZL201410189270.1				07 May 2014
			CNZL201410189332.9				07 May 2014
			CNZL201410189671.7				07 May 2014
	CNZL201410189766.9				07 May 2014		

LTE084	MELCO		EP2346286(DE)				26 Oct 2009	
			EP2346286(FR)				26 Oct 2009	
			EP2346286(GB)				26 Oct 2009	
			IDP00201402756				09 May 2014	
			IDW00201101618				26 Oct 2009	
			IN301593				26 Oct 2009	
			JP5726351				30 Apr 2014	
			JP6297116				05 Oct 2016	
			JP6462920				19 Feb 2018	
			KR101279523				26 Oct 2009	
			RU2461149				26 Oct 2009	
			RU2511040				29 May 2012	
			RU2554533				29 Jan 2014	
	RU2599542				06 May 2015			
	US9877268				23 Jul 2015			
LTE085	MELCO	US10165482		3	3GPP TS 36.300 V10.3.0: Sections 1, 3.2, 4, 4.1, 4.2.1, 4.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.2-3	ISLD-202006-006	14 Feb 2017	
		JP5683474			3GPP TS 24.301 V10.2.0: Sections 1, 5.5.3.1, 5.5.3.2.1, 5.5.3.2.2, 5.5.3.2.4, 8.1, 8.2.26.1, 8.2.26.2, 8.2.26.15; Tanle 8.2.26.1			
			CN2L201080044486.9			3GPP TS 36.300 V9.3.0	ISLD-202006-006	15 Sep 2010
			CN2L201510306774.1					15 Sep 2010
			JP5905533					05 Jun 2015
			JP6219429					11 Jul 2014
			US8626163					16 Mar 2016
	US9615310					15 Sep 2010		
						25 Nov 2013		
LTE086	MELCO	JP4413966			3GPP TS 36.321 V9.2.0	ISLD-202006-006	20 Apr 2005	
			0				09 Aug 2013	
			CN2L200580049478.2					20 Apr 2005
			EP1873925					20 Apr 2005
			EP1873925(DE)					20 Apr 2005
			EP1873925(FR)					20 Apr 2005
			EP1873925(GB)					20 Apr 2005
			JP5546379					16 Jul 2010
			JP5788053					11 Apr 2014
			US8717912					20 Apr 2005
LTE087	MELCO		CN2L200780030693.7				09 Aug 2007	
			EP2068578(DE)				09 Aug 2007	
			EP2068578(FR)				09 Aug 2007	
			EP2068578(GB)				09 Aug 2007	
			JP4776693				09 Aug 2007	
			US8165082				09 Aug 2007	
			US8942198				06 Apr 2012	
	US9277561				11 Dec 2014			
LTE088	MELCO	JP5139543			3GPP TS 36.401 V9.2.1	ISLD-202006-006	28 Jan 2010	
			JP5496311				14 Nov 2012	
			JP5744266				04 Mar 2014	
			US9072104				28 Jan 2010	
			US9357545				08 May 2015	

LTE089	MELCO	JP4812323			3GPP TS 36.211 V8.6.0 3GPP TS 36.213 V8.6.0 3GPP TS 36.212 V8.7.0	ISLD-201207-004	08 Apr 2005		
							07 Apr 2005		
							08 Apr 2004		
							08 Apr 2004		
							08 Apr 2004		
							29 Mar 2005		
			US7756210				07 Apr 2010		
			US8265187				07 Apr 2010		
LTE090	MELCO	JP4963927			3GPP TS 36.300 3GPP TS 36.423 3GPP TS 22.011	ISLD-201207-004	13 Oct 2006		
							12 Oct 2006		
							13 Oct 2005		
							13 Oct 2005		
							13 Oct 2005		
							17 Aug 2010		
							17 Aug 2010		
							17 Aug 2010		
							17 Aug 2010		
							17 Aug 2010		
							17 Aug 2010		
							17 Aug 2010		
							29 Jul 2010		
							21 Sep 2006		
			07 Sep 2010						
			10 Nov 2011						
LTE091	MELCO	US8068444		1	3GPP TS 21.905 v8.8.0: Section 3 3GPP TS 21.211 v8.6.0: Sections 3.1, 4, 4.2, 5.2.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2, 6.2.3, 8.1; Figures 4.2-1, 5.2.1-1, 6.2.2-1; Tables 4.2-1, 5.2.3-1, 6.2.3-1 3GPP TS 36.213 v8.6.0: Section 4.2.3 3GPP TS 36.321 v8.5.0: Sections 5.1.4, 5.2, 6.2.3 3GPP TS 36.300 v8.8.0: Sections 3.2, 5, 5.2.7.3; Figures 5-1, 5-2; Table 5-1	ISLD-201207-004	28 Sep 2006		
			JP4852615		1		3GPP TS 36.211 V8.6.0: Sections 3.1, 4, 4.2, 5.2, 6.2, 8.1 3GPP TS 36.213 V8.6.0: Section 4.2.3 3GPP TS 36.321 V8.5.0: Section 6.2.3 3GPP TS 36.300 V8.8.0: Section 5.2.7	ISLD-201207-004	28 Sep 2006
				EP2134006			1		3GPP TS 36.211 V8.6.0: Sections 3.1, 4.2, 5.2.3, 5.6, 6.2.3, 6.12, 8.1; Figures 4.2-1, 8.1-1; Tables 4.2-1, 4.2-2, 5.2.3-1, 5.6-1, 6.2.3-1, 6.12-1 3GPP TS 36.213 V8.6.0: Section 4.2.3 3GPP TS 36.321 V8.5.0: Section 6.2.3 3GPP TS 36.300 V8.8.0: Section 5.2.7.3
						23 Jun 2009			
						23 Jun 2009			
						28 Sep 2006			
		LTE092	MELCO				CN2L200710101661.3		19 Mar 2007
						17 Sep 2010			
						17 Sep 2010			
						17 Sep 2010			
						17 Sep 2010			
						17 Sep 2010			
						17 Sep 2010			

LTE092	MELCO				EP2276299(DE)			16 Sep 2010	
					EP2276299(FR)			16 Sep 2010	
					EP2276299(GB)			16 Sep 2010	
					US8073459			19 Mar 2007	
LTE093	MELCO	JP5506861		1, 8	3GPP TS 36.201 V8.3.0: Sections 4.1.1, 4.2.1 3GPP TS 36.213 V8.8.0: Sections 7.2		ISLD-201207-004	06 Jun 2012	
		EP2256976		1, 2	3GPP TS 36.201 V8.3.0: Sections 1, 3, 4, 4.1, 4.1.1, 4.2, 4.2.1 3GPP TS 36.213 V8.8.0: Sections 3, 3.2, 7, 7.2, 7.2.2		ISLD-201207-004	09 Sep 2010	
		EP2086146		1, 2	3GPP TS 36.201 V8.3.0: Sections 4.1.1, 4.2.1 3GPP TS 36.212 V8.7.0: Sections 5.2.2.6.2, 5.2.2.6.4 3GPP TS 36.213 V8.8.0: Sections 7.2, 7.2.1		ISLD-201207-004	13 Feb 2009	
		EP1845678		1, 3	3GPP TS 36.201 V8.3.0: Sections 4.1.1, 4.2.1 3GPP TS 36.212 V8.6.0: Sections 5.2.2.6.2, 5.2.2.6.4 3GPP TS 36.213 V8.6.0: Sections 7.2, 7.2.1		ISLD-201207-004	14 Apr 2006	
		CNZL201410767521.X		1, 2, 7, 8	3GPP TS 36.201 V8.3.0: Sections 4.1, 4.1.1, 4.2, 4.2.1 3GPP TS 36.213 V8.8.0: Sections 7.2, 7.2.2		ISLD-201207-004	11 Dec 2014	
			CNZL200710096137.1						13 Apr 2007
			CNZL201110332960.4						13 Oct 2011
			EP1845678(DE)						14 Apr 2006
			EP1845678(ES)						14 Apr 2006
			EP1845678(FI)						14 Apr 2006
			EP1845678(FR)						14 Apr 2006
			EP1845678(GB)						14 Apr 2006
			EP1845678(IT)						14 Apr 2006
			EP1845678(NL)						14 Apr 2006
			EP1845678(PL)						14 Apr 2006
			EP1845678(RO)						14 Apr 2006
			EP1845678(SE)						14 Apr 2006
			EP1845678(TR)						14 Apr 2006
			EP2086146(DE)						13 Feb 2009
			EP2086146(ES)						13 Feb 2009
			EP2086146(FI)						13 Feb 2009
			EP2086146(FR)						13 Feb 2009
			EP2086146(GB)						13 Feb 2009
			EP2086146(IT)						13 Feb 2009
			EP2086146(NL)						13 Feb 2009
			EP2086146(PL)						13 Feb 2009
			EP2086146(RO)						13 Feb 2009
			EP2086146(SE)						13 Feb 2009
			EP2086146(TR)						13 Feb 2009
			EP2256976(DE)						09 Sep 2010
			EP2256976(FR)						09 Sep 2010
			EP2256976(GB)						09 Sep 2010
			EP2256977(DE)						09 Sep 2010
	EP2256977(FR)						09 Sep 2010		
	EP2256977(GB)						09 Sep 2010		
	EP2285030(DE)						09 Sep 2010		
	EP2285030(FR)						09 Sep 2010		
	EP2285030(GB)						09 Sep 2010		
	JP4974744						16 Apr 2007		
	JP5015303						06 Aug 2010		

LTE094	MELCO	US8825067		1, 4	3GPP TS 36.321 V8.7.0: Sections 5.4.1, 5.4.4, 5.4.5 3GPP TS 36.213 V8.8.0: Sections 7.3, 10.1; Table 10.1-5 3GPP TS 36.331 V8.7.0: Sections 6.3.2 3GPP TS 36.211 V8.8.0: Sections 5.4.1, 5.5, 5.5.2.2.1, 5.5.2.2.2; Table 5.5.2.2.2-1	ISLD-201207-004	25 Aug 2011			
		EP2254259		1, 4	3GPP TS 36.211 V8.8.0: Sections 4.1.1, 4.2.1, 5.4.1, 5.5.2.2.1, 5.2.2.2.2 3GPP TS 36.213 V8.8.0: Sections 7.3, 10.1 3GPP TS 36.321 V8.7.0: Sections 5.4.1, 5.4.4, 5.4.5, 7.2.1 3GPP TS 36.331 V8.7.0: Sections 6.3.2	ISLD-201207-004	22 Sep 2006			
			CNZL200710182191.8					21 Sep 2007		
			CNZL201210100356.3					26 Mar 2012		
			EP1903689(DE)					22 Sep 2006		
			EP1903689(FR)					22 Sep 2006		
			EP1903689(GB)					22 Sep 2006		
			EP2254259(DE)					22 Sep 2006		
			EP2254259(FR)					22 Sep 2006		
			EP2254259(GB)					22 Sep 2006		
		JP5327734					20 Sep 2007			
		US8412210					14 Sep 2007			
LTE095	MELCO	EP1871023			3GPP TS 36.213 V8.7.0 3GPP TS 36.211 V8.7.0 3GPP TS 36.212 V8.7.0 3GPP TS 36.331 V8.7.0	ISLD-201207-004	23 Jun 2006			
					EP1871023(DE)					23 Jun 2006
					EP1871023(FR)					23 Jun 2006
					EP1871023(GB)					23 Jun 2006
LTE096	MELCO	JP5810151			3GPP TS 36.213 V10.0.0 3GPP TS 36.211 V10.1.0	ISLD-201207-004	04 Apr 2011			
					CNZL201180029113.9					04 Apr 2011
					EP2559187(DE)					04 Apr 2011
					EP2559187(FR)					04 Apr 2011
					EP2559187(GB)					04 Apr 2011
					EP2559187(IT)					04 Apr 2011
		US8995374				04 Apr 2011				
LTE097	MELCO				EP2136596 EP2136596(DE) EP2136596(FR) EP2136596(GB) JP5844711 JP5852184 US8027392		20 Aug 2009 20 Aug 2009 20 Aug 2009 20 Aug 2009 26 Oct 2012 02 Jul 2014 30 Nov 2005			
LTE098	MELCO				CNZL200610075251.1 EP1715708(DE) EP1715708(FR) EP1715708(GB) US7796704 US8081709		17 Apr 2006 18 Apr 2005 18 Apr 2005 18 Apr 2005 29 Mar 2006 13 Jul 2010			
LTE099	MELCO	JP5089519			3GPP TS 36.213 V8.8.0		25 Jul 2008			
					EP2023504				05 Aug 2008	
					EP2023504(DE)				05 Aug 2008	
					EP2023504(FR)				05 Aug 2008	

LTE099	MELCO		EP2023504(GB)			05 Aug 2008
			KR101061639			25 Jun 2010
			KR101061685			05 Aug 2008
			US8086272			06 Aug 2007
LTE100	MELCO	JP5079098		3GPP TS 36.213 V8.8.0 Section 8.2		07 May 2009
			CNZN200980115949.3			07 May 2009
			EP2313989(DE)			07 May 2009
			EP2313989(FR)			07 May 2009
			US8842554			07 May 2008
LTE101	MELCO	JP5079097		3GPP TS 36.213 V8.8.0		07 May 2009
			CNZN200980116297.5			07 May 2009
			EP2294717			07 May 2009
LTE102	MELCO	JP5199387		3GPP TS 36.213 V8.8.0 Section 8.2		07 May 2009
			CNZN200980116094.6			07 May 2009
			EP2294718(EP)			07 May 2009
			JP5631425			07 Feb 2013
LTE103	MELCO	JP5749159		3GPP TS 36.300 V10.3.0 3GPP TS 36.413 V10.1.0 3GPP TS 36.321 V10.1.0 3GPP TS 36.213 V10.1.0	ISLD-201207-004	09 Jun 2009
			CNZN200980121915.5			09 Jun 2009
			CNZN201410254852.3			10 Jun 2014
			EP2289258(DE)			09 Jun 2009
			EP2289258(FR)			09 Jun 2009
			EP2289258(GB)			09 Jun 2009
			EP2533600(DE)			05 Sep 2012
			EP2533600(FR)			05 Sep 2012
			EP2533600(GB)			05 Sep 2012
			JP5830131			14 May 2014
			KR101561271			09 Jun 2009
			KR101623919			09 Jun 2014
			US8744342			09 Jun 2009
			LTE104	MELCO		CNZN200980136505.8
EP2333994(DE)						24 Jul 2009
EP2333994(FR)						24 Jul 2009
JP5420552						24 Jul 2009
KR101643434						24 Jul 2009
US8526512						24 Jul 2009
LTE105	MELCO		CNZN201080010770.4			10 Mar 2010
			JP5462327			19 Jul 2012
			JP5622950			16 Jan 2014
LTE106	MELCO	JP5806123 EP3190837		4 3GPP TS 36.331 V12.5.0 3GPP TS 36.101 V12.6.0: Sections 6.2.5, 6.2.5C 3GPP TS 36.213 V12.5.0: Sections 5.1.4, 6.1 3GPP TS 36.300 V12.5.0: Sections 4.9, 4.9.1 10.1, 10.1.2.8, 10.1.2.8.1 3GPP TS 36.331 V12.5.0: Sections 6.2.2, 6.3.2	ISLD-202006-006 ISLD-202006-006	09 Feb 2011 23 Feb 2017
			AU2011215256			09 Feb 2011
		AU2016202375			14 Apr 2016	

LTE106	MELCO		EP2536221(DE)				09 Feb 2011		
			EP2536221(FR)				09 Feb 2011		
			EP2536221(GB)				09 Feb 2011		
			IDP000047999				09 Feb 2011		
			JP6076427				03 Sep 2015		
			KR101771415				09 Feb 2011		
			RU2586884				09 Feb 2011		
			US9565713				09 Feb 2011		
LTE107	MELCO	JP5773993			3GPP TS 36.300 V10.2.0	ISLD-202006-006	25 Apr 2011		
				AU2011246790				25 Apr 2011	
				CN201180021251.2				25 Apr 2011	
				IDP000048550				25 Apr 2011	
				JP6072859				29 Jun 2015	
				JP6351699				27 Dec 2016	
				JP6513265				04 Jun 2018	
				KR101790569				25 Apr 2011	
				KR101902174				18 Oct 2017	
				RU2570360				25 Apr 2011	
				RU2612030				05 Nov 2015	
				RU2651808				10 Feb 2017	
				RU2677689				28 Mar 2018	
				US10193672				12 Nov 2014	
			US8917644				25 Apr 2011		
LTE108	MELCO	JP5079139			3GPP TS 36.300 V11.6.0	ISLD-202006-006	23 Mar 2010		
				CN201080018936.7				23 Mar 2010	
				JP5511916				28 Aug 2012	
				JP5721878				25 Mar 2014	
				JP6080885				24 Mar 2015	
				JP6400131				16 Jan 2017	
				US10110356				08 Jun 2017	
				US8953523				23 Mar 2010	
				US9438390				06 Nov 2014	
			US9705648				18 Mar 2016		
LTE109	MELCO	US10200976		2	3GPP TS 36.101 V11.3.0: Sections 2, 3.3, 5.5; Table 5.5-1 3GPP TS 36.300 V11.2.0: Sections 4, 7.5 3GPP TS 36.311 V11.2.0: Sections 3.2, 4.2.1, 5.1.2, 5.2.1.1, 5.2.2.1, 6.2.1, 6.3.1, 6.3.4; Figure 5.2.2.1-1	ISLD-202006-006	19 Apr 2018		
			JP5980124			3GPP TS 36.101 V14.0.0	ISLD-202006-006	20 Dec 2011	
			JP6312753					26 Jul 2016	
			JP6526276					14 Mar 2018	
			US9380563					20 Dec 2011	
			US9980251				24 May 2016		
LTE110	MELCO	JP5922101			3GPP TS 36.300 V14.3.0	ISLD-202006-006	26 Mar 2012		
				JP6257684				13 Apr 2016	
				JP6431166					05 Dec 2017
				US9392599					26 Mar 2012
			US9730213				13 Jun 2016		

LTE111	KPN	EP2486750		1	3GPP TS 36.331 V10.20.0: Sections 5.6.5.1, 5.6.5.2, 5.6.5.3, 5.6.6.1, 5.6.6.2, 6.2.2, 6.3.1 3GPP TS 25.331 V10.20.0: Sections 10.3.7.13, 10.3.7.23, 10.3.7.33 3GPP TS 36.306 V10.15.0: Sections 4.3.7.1, 4.3.7.9, 4.3.7.11, 4.3.13.1 3GPP TS 37.320 V10.4.0: Sections 3.1, 4.1, 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3.2, 5.1.1.3.3 3GPP TS 32.422 V10.13.0: Sections 4.1.1.6a, 4.1.5, 6 3GPP TS 36.304 V10.8.0: Section 8 3GPP TS 36.300 V10.12.0: Section 22.3.2a	ISLD-201606-002 ISLD-201606-003	05 Oct 2010
			EP2486750(DE)				05 Oct 2010
			EP2486750(ES)				05 Oct 2010
			EP2486750(FI)				05 Oct 2010
			EP2486750(FR)				05 Oct 2010
			EP2486750(GB)				05 Oct 2010
			EP2486750(NL)				05 Oct 2010
			EP2486750(PL)				05 Oct 2010
			EP2486750(SE)				05 Oct 2010
			JP5600176				05 Oct 2010
US8660560				05 Oct 2010			
LTE112	KPN	EP2566263(EP)		1, 15	3GPP TS 23.682 v13.9.0: Sections 4.5.5, 5.5.1; Figure 5.5.1-1 3GPP TS 23.246 v13.3.0: Sections 4.4.1, 4.4.3.3, 4.4.3.4; Figure 4 3GPP TS 36.331 v13.6.1: Sections 5.8a.1.1, 5.8a.2.1, 6.2.2, 6.3.7a; Figure 5.8a.2.1-1	ISLD-201708-016	05 Oct 2010
			EP2486767(EP)				05 Oct 2010
			JP5562425				05 Oct 2010
			JP5847067				12 Dec 2012
US9913072				28 Dec 2012			
LTE113	KPN	US9699820		16	3GPP TS 23.303 v12.8.0: Sections 5.6.2; Annex A: informative A.2	ISLD-201605-011	10 Aug 2016
			CNZL201380046671.5				29 Aug 2013
			EP2893734(EP)				29 Aug 2013
			EP3079391(EP)				29 Aug 2013
			JP6072918				29 Aug 2013
			KR101692171				29 Aug 2013
			KR101760229				29 Aug 2013
US9438572				29 Aug 2013			
LTE114	KPN	US9372098		1, 15, 17, 21	3GPP TS 23.401 v13.8.0: Sections 4.11, 5.3.4 B, 5.3.4 B.1; Figure 5.3.4. B-1 3GPP TS 23.682 v13.6.0: Sections 5.13.4; Figure 5.13.4-1	ISLD-201605-009	03 Jun 2011
			CNZL200980152983.8		19	3GPP TS 23.401 V13.6.0: Sections 4.11, 5.3.2.1, 5.3.4B, 5.3.4B.1, 5.3.4B.2; Figure 5.3.2.1-1, 5.3.4B.2-1 3GPP TS 23.682 V13.5.0: Section 5.13.4; Figure 5.13.4-1	ISLD-201605-009
		EP2342538(DE)				28 Oct 2009	
		EP2342538(ES)				28 Oct 2009	
		EP2342538(FI)				28 Oct 2009	
		EP2342538(FR)				28 Oct 2009	
		EP2342538(GB)				28 Oct 2009	
		EP2342538(NL)				28 Oct 2009	
		EP2342538(PL)				28 Oct 2009	
		EP2342538(SE)				28 Oct 2009	
		EP2615421(CH)				28 Oct 2009	
		EP2615421(DE)				28 Oct 2009	
		EP2615421(FI)				28 Oct 2009	
		EP2615421(FR)				28 Oct 2009	
		EP2615421(GB)				28 Oct 2009	
		EP2615421(IT)				28 Oct 2009	
EP2615421(NL)				28 Oct 2009			

LTE114	KPN		EP2615421(SE)			28 Oct 2009	
			IN341508			19 Apr 2011	
			US10419910			08 Jun 2016	
LTE115	KPN	US9820134		12, 13, 14	3GPP TS 23.303 v13.6.0: Sections 3.1, 3.2, 4.6.4.2a, 5.3.1.2, 5.3.2A, 5.3.3A.2, 5.3.3A.4; Figures 5.3.2A-1, 5.3.3A.2A-1, 5.3.3A.4A-1	ISLD-201708-015 ISLD-201809-330	23 Jan 2014
			JP6145177				23 Jan 2014
LTE116	MELCO	JP4800388			3GPP TS 36.304 V10.5.0	ISLD-202006-006	09 Aug 2006
			CNZL200680050128.2				09 Aug 2006
			CNZL201510225622.9				06 May 2015
			JP5236774				22 Apr 2011
			JP5602255				11 Jan 2013
US8660046				09 Aug 2006			
LTE117	KPN	EP2656648		9	3GPP TS 33.163 V15.0.0: Sections 3.1, 3.2, 4.5, 4.6.2, 4.6.2.2, 5.1.3; Figures 4.6.2.2-1; Table: 5.1.3-1 3GPP TS 33.220 V15.0.0: Appex B.2.0	ISLD-201903-013	06 Dec 2011
			EP2656648(DE)				06 Dec 2011
			EP2656648(FI)				06 Dec 2011
			EP2656648(FR)				06 Dec 2011
			EP2656648(GB)				06 Dec 2011
			EP2656648(IT)				06 Dec 2011
			EP2656648(NL)				06 Dec 2011
			EP2656648(SE)				06 Dec 2011
			US10103887				20 Jun 2013
LTE118	Sisvel International	US10064176		1, 6, 9	3GPP TS 36.331 V12.5.0: Sections 5.1.1, 5.10.1, 5.10.1a, 5.10.2.1, 5.10.2.2, 5.10.7.1, 5.10.7.4, 6.3.1, 6.3.2, 6.5.1, 6.5.2, Figures 5.10.2-1, 5.10.7.1-1, 5.10.7.1-2; 5.10.7.1-3 3GPP TS 36.221 V12.5.0: Sections 4, 4.2; Table 4.2-2 3GPP TS 23.303 V12.4.0: Sections 1, 4.4.1.1, 4.4.2, 4.5.1.1.2.3.1, 4.5.6	ISLD-202006-010	09 Jun 2014
			CNZL201410255736.3				10 Jun 2014
LTE119	Sisvel International	US9973324		1, 11	3GPP TS 36.213 V12.4.0: Sections 7.1, 8.0; Table 8-2 3GPP TS 36.306 V12.3.0: Sections 4.3.4.28, 3GPP TS 36.212 V12.3.0: Sections 5.3.3, 5.3.3.1.1, 5.3.3.1.8	ISLD-201805-023	08 May 2014
			US10498520		1, 11	3GPP TS 36.213 V12.4.0: Sections 7.1, 8.0; Table 8-2 3GPP TS 36.306 V12.3.0: Sections 4.3.4.28, 3GPP TS 36.212 V12.3.0: Sections 5.3.3, 5.3.3.1.1, 5.3.3.1.8	ISLD-201805-023
		CNZL201410090475.4				12 Mar 2014	
LTE120	Sisvel International	US10412748		1	3GPP TS 36.212 V13.0.0: Sections: 5.3.3, 5.3.3.1, 5.3.3.1.1, 5.3.3.1.2, 5.3.3.1.3 3GPP TS 36.331 V13.1.0: Sections 6.2, 6.2.2, 6.3.2, 6.3.4, 6.4, 8.0 3GPP TS 23.003 V8.17.0: Section 7.1	ISLD-202006-010	28 Dec 2015
			CNZL201410852934.8		1, 5, 9, 13	3GPP TS 36.212 V13.0.0: Sections 1, 5.3.3, 5.3.3.1, 5.3.3.1.1, 5.3.3.1.2, 5.3.3.1.3, 5.3.3.1.3A, 5.3.3.1.4A, 5.3.3.1.5, 5.3.3.1.5A, 5.3.3.1.5B, 5.3.3.1.5C, 5.3.3.1.5D, 5.3.3.1.8 3GPP TS 36.331 V13.1.0: Sections 1, 4.1, 5.3.5.1, 6.2.2, 6.3.2, 6.3.4, 6.4; Figures 5.3.5.1-1, 5.3.5.1-2 3GPP TS 36.213 V13.1.0: Sections 7.1, 8.0	ISLD-202006-010
LTE121	Sisvel International	US10362566		1	3GPP TS 36.321 V14.3.0: Sections 3.1, 3.2, 5.4, 5.4.4 3GPP TS 36.331 V14.3.0: Sections 3.1, 6.3, 6.3.2 3GPP TS 36.213 V14.7.0: Sections 10, 10.1, 10.1.5	ISLD-202006-010	28 Dec 2015

LTE121	Sisvel International	CNZL201510040667.9		1, 8	3GPP TS 36.321 V14.3.0: Sections 5.4.4 3GPP TS 36.331 V14.3.0: Sections 3.1, 6.3.2 3GPP TS 36.213 V14.7.0: Sections 10, 10.1, 10.1.1, 10.1.5	ISLD-202006-010	27 Jan 2015
			US10798690				04 Jun 2019
LTE122	Sisvel International	CNZL201510698366.5		1, 17	3GPP TS 36.211 V14.3.0: Sections 4.1, 4.2, 5.2.3, 6.2.3, 10.1.2.1, 10.1.2.3, 10.2.2.1, 10.2.5.1, 10.2.7, 10.2.7.1, 10.2.7.1.1, 10.2.7.1.2, 10.2.7.2, , 10.2.7.2.1, 10.2.7.2.2, ; Tables 5.2.3-1, 6.2.3-1, 10.1.2.1-1, 10.2.5.1-1, 10.2.7.1.1-1 3GPP TS 36.213 V14.3.0: Sections 16.4, 16.4.1, 16.4.1.3, 16.5.1, 16.5.1.1,16.6; Table 16.4.1.3-1, 16.4.1.3-2, 16.5.1.1-2, 16.5.1.1-3, 16.6-1 3GPP TS 36.331 V14.3.0: Sections 3.1, 5.2.1.1, 5.2.1.2a, 6.7.2, 6.7.3.2; FigureL 5.2.2.1-1 3GPP TS 36.212 V14.3.0: Sections 6.1, 6.4.3, 6.4.3.1, 6.4.3.2; Tables 6.1-3	ISLD-202006-010	23 Oct 2015
			US10826665				11 Jul 2016
LTE123	Sisvel International	US10484143		1	3GPP TS 36.213 V15.3.0: Sections 7.1, 7.3, 7.3.1, 10.1, 10.1.2.1, 10.1.2.2.2, 10.1.2.2.3; Table 10.1-1 3GPP TS 36.211 V15.1.0: Sections 4.1; Figure 4.1-1; Table 4.1-1 3GPP TS 36.212 V15.2.1: Sections 5.3.3.1.3, 5.3.3.1.17, 5.3.3.1.18, 5.3.3.1.19, 5.3.3.1.20, 5.3.3.1.21, 5.3.3.1.22, 5.3.3.1.23; Table 5.3.3.1.17-1 3GPP TS 36.331 V15.3.0: Section 6.3.2	ISLD-202006-010	31 Aug 2018
		CNZL201610121604.0		1, 17	3GPP TS 36.213 V15.3.0: Sections 7.1, 7.3, 7.3.1, 10.1, 10.1.1, 10.1.2.1, 10.1.2.2.2, 10.1.2.2.3; Table 10.1-1 3GPP TS 36.211 V15.1.0: Sections 4.1; Figure 4.1-1; Table 4.1-1 3GPP TS 36.212 V15.2.1: Sections 5.3.3.1.3, 5.3.3.1.17, 5.3.3.1.18, 5.3.3.1.19, 5.3.3.1.20, 5.3.3.1.21, 5.3.3.1.22, 5.3.3.1.23; Table 5.3.3.1.17-1 3GPP TS 36.331 V15.3.0: Section 6.3.2	ISLD-202006-010	03 Mar 2016
LTE124	Sisvel International	US9749969		1, 9	3GPP TS 36.331 V13.1.0: Sections 3.1, 3.2, 4.2.2, 5.2.1.1, 5.2.2.1, 5.3.3.1, 6.2.2, 6.3.1, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1 3GPP TS 36.213 V12.5.0: Sections 5.1.2, 5.1.2.1, 5.1.4, 5.1.4.1, 5.1.4.2 3GPP TS 36.101 V12.5.0: Sections 6.2.5	ISLD-202006-010	12 Feb 2015
LTE125	3G Licensing	US8879503		10	3GPP TS 24.301 V.11.10.0: Sections 1, 4.3.1, 5.5.1.2.4, 5.5.3.2.4, 8.2.1.1, 8.2.26.1, 9.9.3.12A; Tables 8.2.1.1, 8.2.26.1, 9.9.3.12A.1 3GPP TS 24.229 V.11.9.0: Sections 4.3.2.4, 4.5, 5.1.1.2.1; Annex L.3, L.3.1.2; Tables 4.3.2.4.1	ISLD-201008-013 ISLD-201111-004	26 Sep 2011
			EP2438782(DE)				03 Jun 2010
			EP2438782(ES)				03 Jun 2010
			EP2438782(FR)				03 Jun 2010
			EP2438782(GB)				03 Jun 2010
			EP2438782(IT)				03 Jun 2010
			EP2438782(NL)				03 Jun 2010
			EP2438782(PL)				03 Jun 2010
LTE126	3G Licensing	US8600383		1	3GPP TS 36.304 v8.10.0: Sections 1, 5.2.1, 5.2.4.4	ISLD-201202-005 ISLD-201301-011 ISLD-201402-021	14 Sep 2012
			CA2516278				18 Aug 2005
			EP1628497(DE)				18 Aug 2005
			EP1628497(ES)				18 Aug 2005
			EP1628497(FI)				18 Aug 2005
			EP1628497(FR)				18 Aug 2005
			EP1628497(GB)				18 Aug 2005
			EP1628497(IT)				18 Aug 2005
			US7463887				18 Aug 2004
			US8290491				26 Sep 2011

LTE126	3G Licensing		US8351940				07 Nov 2008	
LTE128	3G Licensing	US8189611		1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	ISLD-201402-021	02 Dec 2008	
			CNZN200610064046.5					03 Nov 2006
			CNZN201010576392.8					03 Nov 2006
			EP1783961(NL)					04 Nov 2005
			EP1924037(GB)					20 Feb 2008
			EP1924037(IT)					20 Feb 2008
			EP2184946(GB)					03 Mar 2010
			EP2184946(IT)					03 Mar 2010
			EP2184946(NL)					03 Mar 2010
			EP2184946(SE)					03 Mar 2010
			HK1102880					17 Oct 2007
			HK1143266					06 Oct 2010
			JP4909707					01 Nov 2006
			JP5368498					16 Feb 2011
			KR101116459					25 Mar 2011
			KR101116524					03 Nov 2006
			SG131920					31 Oct 2006
TWI338527					03 Nov 2006			
US7474671					04 Nov 2005			
US8379666					16 Apr 2012			
LTE129	3G Licensing	US8472955		1	3GPP TS 23.122 V8.12.0: Sections 1.2, 4.2, 4.4.3.1.1; Annex A 3GPP TS 22.011 V8.11.0: Sections 1.2, 3.2.2.1 3GPP TS 31.102 V8.11.0: Sections 1, 4.2.84, 4.2.53, 5.1.1.2 3GPP TS 36.331 V8.21.0: Sections 6.1, 6.3.4 3GPP TS 24.301 V8.10.0: Sections 8.2.1.1, 9.9.3.32, 9.9.3.33; Table 8.2.1.1; Figures 9.9.3.32.1, 9.9.3.33.1 3GPP TS 22.101 V8.15.0: Sections A.3	ISLD-200911-009 ISLD-201208-005 ISLD-201301-011	03 Jul 2012	
			CA2478008					20 Aug 2004
			CA2680720					10 Sep 2009
			EP1513358(DE)					03 Sep 2003
			EP1513358(FR)					03 Sep 2003
			EP1513358(GB)					03 Sep 2003
			HK1075996					23 Aug 2005
			US7274933					02 Sep 2004
			US7460868					03 Aug 2007
			US7596375					22 Sep 2008
			US8275374					26 Aug 2009
			US8948756					13 Jun 2013
			LTE130	Sisvel SPA	EP2315383		1	3GPP TS 36.322 V8.5.0: Sections 4.2.1.3.1, 5.1.3.1.1, 5.1.3.2.1, 5.1.3.2.3, 5.2.1, 5.2.3, 6.1.2, 6.2.1.6, 6.2.2.14, 6.2.2.16, 7.1, 7.3; Figures 6.2.1.6-1
CNZN200780001723.1								03 Jan 2007
CNZN201110399482.9								05 Dec 2011
EP2315383(AT)								03 Jan 2007
EP2315383(BE)								03 Jan 2007
EP2315383(BG)								03 Jan 2007
EP2315383(CH)								03 Jan 2007
EP2315383(CY)								03 Jan 2007
EP2315383(CZ)								03 Jan 2007
EP2315383(DE)								03 Jan 2007
EP2315383(DK)								03 Jan 2007
EP2315383(EF)								03 Jan 2007

LTE131	Sisvel SPA		EP2248383(LT)				10 Sep 2009	
			EP2248383(LU)				10 Sep 2009	
			EP2248383(LV)				10 Sep 2009	
			EP2248383(MC)				10 Sep 2009	
			EP2248383(MK)				10 Sep 2009	
			EP2248383(MT)				10 Sep 2009	
			EP2248383(NL)				10 Sep 2009	
			EP2248383(NO)				10 Sep 2009	
			EP2248383(PL)				10 Sep 2009	
			EP2248383(PT)				10 Sep 2009	
			EP2248383(RO)				10 Sep 2009	
			EP2248383(SE)				10 Sep 2009	
			EP2248383(SI)				10 Sep 2009	
			EP2248383(SK)				10 Sep 2009	
			EP2248383(TR)				10 Sep 2009	
			JP5238067				10 Sep 2009	
			JP5426001				19 Nov 2012	
	JP6002118				27 Nov 2013			
	KR100956828				24 Jul 2009			
	US8009606				19 Oct 2009			
	US8411633				17 Mar 2011			
	US8971279				08 Mar 2013			
	US9369254				20 Jan 2015			
LTE132	MELCO	JP6612940		4	3GPP TS 36.300 V12.5.0: Sections 4, 4.9.1 and 10.1.2.8.1 3GPP TS 35.423 V12.5.0: Sections 1 and 9.1.3.2 3GPP TS 36.331 V12.5.0: Sections 6.2.2 and 6.3.2	ISLD-202006-006	26 Jul 2018	
				JP5746059				09 Feb 2011
				JP5976161				28 Apr 2015
				JP6378258				15 Jul 2016
				US10051642				20 Apr 2016
	US9350496				09 Feb 2011			
LTE133	MELCO	JP5784029			3GPP TS 36.300 V13.2.0	ISLD-202006-006	27 Sep 2011	
				JP5955439				21 Jul 2015
				JP6246267				14 Jun 2016
				JP6415670				13 Nov 2017
	US9320016				27 Sep 2011			
LTE134	MELCO	JP5084951			3GPP TS 36.331 V12.0.0	ISLD-202006-006	21 Apr 2010	
				CNZL201080018941.8				21 Apr 2010
				JP5518151				04 Sep 2012
				JP5744276				01 Apr 2014
				JP6169123				28 Apr 2015
				US10356635				21 Apr 2016
	US9350501				21 Apr 2010			
LTE135	Sisvel International	US9980306		1, 13	3GPP TS 36.331 V12.5.0: Sections 1, 4, 4.1, 4.2, 5.10.1, 5.10.7.1, 5.10.7.2, 5.10.7.3, 5.10.7.4, 5.10.7.5, 5.10.9.1, 6.3.8, 6.5.2; Figures 4.1-1, 4.2-1, 5.10.7.1-1, 5.10.7.1-2, 5.10.7.1-3	ISLD-202006-010	29 Aug 2014	
				CNZL201310608978.1				25 Nov 2013
				EP3051853(DE)				29 Aug 2014
				EP3051853(FR)				29 Aug 2014
				EP3051853(GB)				29 Aug 2014
				KR102180368				29 Aug 2014

LTE136	3G Licensing	US9635142		9	3GPP TS 36.331 V8.21.0: Sections 5.3.10.3, 6.3.2 3GPP TS 36.323 V8.6.0: Sections 5.5.1		24 May 2012
			AU2003252560				14 Aug 2003
			BE2375654				14 Aug 2003
			CNZL03802108.0				14 Aug 2003
			CNZL200910252337.0				02 Dec 2009
			CNZL200910252338.5				02 Dec 2009
			CNZL200910252339.X				02 Dec 2009
			CNZL200910252340.2				02 Dec 2009
			EP1532778(DE)				14 Aug 2003
			EP1532778(ES)				14 Aug 2003
			EP1532778(FI)				14 Aug 2003
			EP1532778(FR)				14 Aug 2003
			EP1532778(GB)				14 Aug 2003
			EP1532778(IT)				14 Aug 2003
			EP1532778(NL)				14 Aug 2003
			EP1532778(SE)				14 Aug 2003
			EP2256999(DE)				14 Aug 2003
			EP2256999(FR)				14 Aug 2003
			EP2256999(GB)				14 Aug 2003
			EP2256999(IT)				14 Aug 2003
			EP2256999(PT)				14 Aug 2003
			EP2375654(DE)				14 Aug 2003
			EP2375654(FR)				14 Aug 2003
			EP2375654(GB)				14 Aug 2003
			EP2375654(NL)				14 Aug 2003
			HK1077441				21 Oct 2005
			IDP0024236				14 May 2004
IL161838				06 May 2004			
IN201107				14 Aug 2003			
JP4008447				14 Aug 2003			
KR100981823				08 Apr 2008			
KR101020318				05 Mar 2010			
KZ19891				14 Aug 2003			
MX265811				14 Aug 2003			
RU2310283				08 Sep 2004			
UA77036				14 Aug 2003			
US7366105				14 Aug 2003			
US8139555				04 Apr 2008			
US8848684				14 Aug 2003			
US9635140				14 Aug 2003			
US9635141				14 Aug 2003			
ZA200403512				14 Aug 2003			
LTE137	3G Licensing	US8451818		1	3GPP TS 36.322 V8.8.0: Sections 4.2.1, 4.2.1.1.1, 4.2.1.1.2, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.3, 4.2.1.3.1, 4.2.1.3.2; Figure 4.2.1.1.1-1, 4.2.1.2.1-1, 4.2.1.3.1-1		23 Jul 2010
			US6788652				12 Nov 1999
			US6804202				18 Jan 2000
			US7583699				08 Sep 2003
			US7756159				12 Jan 2009
			US7920595				31 Aug 2007

LTE138	3G Licensing	US7782833		1	3GPP TS 36.321 V8.12.0: Sections 1, 3.2, 4.2.1, 4.3.1, 4.3.2, 4.4, 4.5, 4.5.1, 4.5.2, 4.5.3, 4.5.3.1, 4.5.3.2, 6.1.1, 6.1.2, 6.2.1; Figures 4.2.1.1, 4.5.3.1-1, 4.5.3.2-1, 6.1.2-1, 6.1.2-2, 6.1.2-3; Tables 4.4-1, 4.5.1-1, 4.5.2-1, 4.5.3.1-1, 4.5.3.2-1 3GPP TS 36.322 v8.8.0: Sections 3.2, 4.2.1, 4.3.2; Figure 4.2.1-1		31 Jan 2007
LTE139	3G Licensing	US8130819		1	3GPP TS 36.321 V8.12.0: Sections 5.3.2.1, 5.3.2.2 3GPP TS 36.212 V.8.8.0: Section 5.2.3.1 3GPP TS 36.213 V8.8.0: Section 10.1		09 Jun 2011
			CA2654104			02 Dec 2008	
			CNZL2007800225821			16 Dec 2008	
			EP2033354(DE)			13 Jan 2009	
			EP2033354(DK)			13 Jan 2009	
			EP2033354(FR)			13 Jan 2009	
			EP2033354(SE)			13 Jan 2009	
			EP2262154(DE)			01 Oct 2010	
			EP2262154(FR)			01 Oct 2010	
			EP2262154(GB)			01 Oct 2010	
			IN269232			05 Dec 2008	
			JP5443982			15 Dec 2008	
			JP5685564			13 Sep 2012	
			KR101253162			16 Jun 2006	
			KR101265596			16 Jun 2006	
KR101285379			08 Aug 2008				
TWI443996			20 Jun 2007				
US7916775			15 Jun 2007				
US7983330			17 Dec 2010				
US8320434			18 Jan 2012				
LTE140	Fraunhofer HHI	KR101204134		19	3GPP TS 26.247 V14.4.0: Sections 7.1, 7.3.4 and Figure 7-1	ISLD-201908-011	03 Dec 2008
			CA2722204			03 Dec 2008	
			IN3930/KOLNP/2010			21 Oct 2010	
			JP5238069			03 Dec 2008	
			TWI463875				16 Apr 2009
LTE141	Fraunhofer HHI	EP2242187		1	3GPP TS 36.101 V10.0.0 : Sections 7.1, 7.5.1 3GPP TS 36.200 V10.0.0 : Sections 4 ; Figure 4-1 3GPP TS 36.201 V10.0.0 : Sections 4.1.2 3GPP TS 36.211 V11.0.0 : Sections 6.3.3.2 3GPP TS 36.214 V10.0.0 : Sections 4, 5.1.1, 5.1.3, 7.1, 7.5.1 3GPP TS 36.306 V11.0.0 : Sections 4.1, 4.3.5.2 ; Table 4.1-1	ISLD-201809-209 ISLD-201908-011	14 Apr 2009
			EP2242187(DE)			14 Apr 2009	
			EP2242187(ES)			14 Apr 2009	
			EP2242187(FR)			14 Apr 2009	
			EP2242187(GB)			14 Apr 2009	
			EP2242187(IT)			14 Apr 2009	
LTE142	Fraunhofer HHI	CNZL201280063481.X		43	3GPP TS 26.247 V14.4.0: Sections 7.1, 10.1, 10.2.4, 10.2.6, Annex L, Figure 7-1, Figure L-1, Table 27 3GPP TS 36.300 V13.1.0: Section 4.1	ISLD-201908-011	22 Oct 2012
			JP5908984			22 Oct 2012	
			JP6254631			24 Mar 2016	
			JP6533275			30 Nov 2017	
			JP6560413			23 Jul 2018	
			KR101618483			22 Oct 2012	
			KR101824487			22 Oct 2012	

LTE142	Fraunhofer HHI		US9775163				18 Apr 2014	
LTE143	Fraunhofer HHI	US10237747		1	3GPP TS 36.300 V14.11.0: Sections 5.7, 10.2.3.4, 22A.1.1, 22A.1.5 and 22A.1.6	ISLD-201912-064	25 Mar 2016	
			CNZL201480052800.6					26 Sep 2014
			JP6574761					26 Sep 2014
			KR101822312					26 Sep 2014
LTE144	Fraunhofer HHI	TWI683561		18	3GPP TS 36.331 V14.12.0 : Sections 1, 4.4 and 6.3.2 3GPP TS 36.212 V14.10.0 : Section 5.3.3.1 3GPP TS 36.213 V14.12.0 : Section 9.2	ISLD-201912-064	10 Aug 2017	
LTE145	Fraunhofer HHI	TWI662823		1, 3, 10, 19-23	3GPP TS 36.331 V14.9.0: Sections 1, 3.1, 4.1, 4.2.1, 5.2.1.2, 5.2.1.2a, 6.2.2, 6.7.3.1, 6.7.3.2 3GPP TS 36.211 V14.2.0: Section 4.1 3GPP TS 36.101 V14.3.0: Table 5.6-1	ISLD-201908-011 ISLD-201912-064	26 Sep 2017	
								25 Sep 2017
			RU2713403					