UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ericsson Inc.

Petitioner

V.

Electronics and Telecommunications Research Institute

Patent Owner

Patent No. 9,204,438 B2 Filing Date: April 27, 2015 Issue Date: December 1, 2015

Title: GENERATING DOWNLINK FRAME AND SEARCHING FOR CELL

Inter Partes Review No. IPR2019-00239

PETITION FOR *INTER PARTES* REVIEW UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 *ET SEQ*.



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		1.	The '272 Application fails to provide § 112 ¶1 Support for "the [first/second] secondary synchronization signal comprises a first short sequence and a second short sequence, the [first/second] short sequence is scrambled with a first scrambling sequence, and the [second/first] short sequence is scrambled with a second scrambling sequence and a [third/fourth] scrambling sequence"	31
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	A.	Ground #1: 36.211 v8.2.0 Anticipates Claims 15-18 and/or Renders Them Obvious			
		1.		OSITA would Understand 36.211 v8.2.0 to Anticipate n 15 and/or Render it Obvious	37
			a.	[15pre] A method of generating a downlink frame in a wireless communication system, the method comprising:	37
			b.	[15a.] generating a downlink frame including a primary synchronization signal, a first secondary synchronization signal and a second secondary synchronization signal; and	40
			c.	[15b.] including cell identity group information in each of the first and second secondary synchronization signals and including cell identity information within a cell identity group in the primary synchronization signal so that a terminal searches for a cell using the cell identity group information and the cell identity information;	41
			d.	[15c.] wherein the cell identity group information is identified using at least one of the first secondary synchronization signal and the second secondary synchronization signal, and the cell identity information is identified using the primary synchronization signal	45
			e.	[15d] wherein the first secondary synchronization signal comprises a first short sequence and a second short sequence, the first short sequence is	



	scrambled with a first scrambling sequence, and the second short sequence is scrambled with a second scrambling sequence and a third scrambling sequence
f.	[15e] wherein the second secondary synchronization signal comprises the first short sequence and the second short sequence, the second short sequence is scrambled with the first scrambling sequence, and the first short sequence is scrambled with the second scrambling sequence and a fourth scrambling sequence, and
g.	[15f] wherein the first scrambling sequence and the second scrambling sequence are determined based on the cell identity information contained in the primary synchronization signal, the third scrambling sequence is determined based on a remainder of dividing an index of the first short sequence by 8, and the fourth scrambling sequence is determined based on a remainder of dividing an index of the second short sequence by 8; and
h.	[15g] transmitting the downlink frame through a transmission antenna
	SITA would Understand 36.211 v8.2.0 to Anticipate a 16 and Render it Obvious
a.	[16pre] The method of claim 1552
b.	[16a] wherein the first short sequence scrambled with the first scrambling sequence and the second short sequence scrambled with the second scrambling sequence and the third scrambling sequence in the first secondary synchronization signal are alternately disposed on a plurality of sub-carriers, and the second short sequence scrambled with the first scrambling sequence and the first short sequence scrambled with the second scrambling sequence and a fourth scrambling



2.

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