

QUALCOMM Incorporated

5775 Morehouse Drive San Diego, CA 92121-1714 858-587-1121 www.qualcomm.com

December 21, 2015

Via Email and Federal Express

Attn: Daro Bruno ATSC 1776 K STREET NW 8th FLOOR WASHINGTON, DC 20006-2304

Re: QUALCOMM Incorporated's IPR Declaration of December 21, 2015 for ATSC Candidate Standard: ATSC Working Draft: Link-Layer Protocol (S33-169r1).

Dear Sir,

Enclosed please find Qualcomm Incorporated's IPR Disclosure Statement and Licensing Declaration for ATSC Candidate Standard: ATSC Working Draft: Link-Layer Protocol (S33-169r1).

Please confirm receipt of this declaration at your earliest convenience via email to ip.disclosure@qualcomm.com. If you have any questions or concerns, please contact me directly at 858-587-1121. Thank you for your time and assistance with this matter.

Sincerely,

Thomas R. Rouse VP, QTL Patent Counsel Qualcomm Incorporated

TR/jwn

ATSC

Disclosure Statement and Licensing Declaration

This declaration does not represent an implied license grant

Please return to: President ATSC 1750 K Street NW Suite 1200 Washington, DC 20006 202-872-9160 – Office 202-872-9161 - Fax	
Discloser: Name of Participant:	QUALCOMM Incorporated
Contact Information for Participant's Representative:	Thomas R. Rouse, VP, QTL Patent Counsel
Name of Representative:	Thomas R. Rouse, VP, QTL Patent Counsel
Address:	5775 Morehouse Drive, San Diego, CA 92121
Tel. No.:	858-587-1121
Fax:	858-658-2503
Email:	ip.disclosure@qualcomm.com
URL (optional):	www.qualcomm.com
Identification of ATSC Specification	Document relevant to the Disclosure Statement:
Number:	
Title: ATSC Working Draft:	Link-Layer: Protocol (S33-169r1)

Licensir	ng Declaration
Essent Specific	iscloser is the holder of a patent and/or pending patent application that is the subject of an ial Claim, i.e., the use of which it believes would be required to implement theidentified ATSC cation Document, the Discloser hereby declares, in accordance with the Statement on ATSC Patent see ATSC website), that (check one box only).
	a. The Discloser agrees to make a license to the Essential Claim available without compensation upon request to all applicants for the purpose of implementing the Specification Document, which license may be conditioned upon license reciprocity with respect to the same Specification Document. Negotiations are left to the parties concerned and are performed outside of ATSC.
	Mark here if the Discloser's willingness to license is conditioned on reciprocity for the above ATSC Standard.
	b. The Discloser agrees to make a license to the Essential Claim available upon request under reasonable and nondiscriminatory terms and conditions to all applicants for the purpose of implementing the Specification Document, which conditions may include license reciprocity with respect to the same Specification Document. Negotiations are left to the parties concerned and are performed outside of ATSC. Mark here if the Discloser's willingness to license is conditioned on reciprocity for
	the above ATSC Standard.
	c. The Discloser will not make a license to the Essential Claim under reasonable and nondiscriminatory terms and conditions to applicants for the purpose of implementing the Specification Document.
of its rig Rather, not see is called to not of ATSC S	t Compensation: The phrase "without compensation" does not mean that the Discloser is waiving all ghts with respect to each patent or patent application that is the subject matter of the Essential Claim. "without compensation" refers to the issue of monetary compensation; <i>i.e.</i> , that the Discloser will ek any monetary compensation as part of the licensing arrangement (whether such compensation d a royalty, a one-time licensing fee, etc.). However, while the Discloser in this situation is committing charging any monetary amount, the Discloser is still entitled to require that the implementer of the Specification Document sign a license agreement that contains other reasonable terms and conditions is those relating to governing law, field of use, reciprocity, warranties, etc.
any pronondisco patent a	ocity: As used herein, the word "reciprocity" means that the Discloser shall only be required to license respective licensee under the stated terms (without compensation or under reasonable and criminatory terms and conditions) if such prospective licensee will commit to license its patent(s) or application(s) forming the subject matter of an Essential Claim under similar (without compensation or reasonable and nondiscriminatory) terms and conditions.

In accordance with Sections 3 and 4 of the ATSC Patent Policy, if the Discloser has made a licensing declaration under paragraph (c) above, please provide the following information.

- an identification of each patent or patent application that is the subject matter of the Essential Claim;
- an identification of specific section(s) or text of the Specification Document that are relevant to the Essential Claim; and
- an identification of each patent or patent application claim covering the Specification Document.

This information is informal in nature and does not constitute a legal opinion, but should be based on "good faith and belief" of the Discloser. Information provided in this section does not represent a formal "notice" that implementation of any resulting ATSC Standard or Recommended Practice would infringe any patent or patent application for the Essential Claim.

Completed By:	
Name of Participant:	QUALCOMM Incorporated
Name of Representative:	Thomas R. Rouse
Title of Representative: Signature:	VP, QTL Patent Counsel
Place, Date:	San Diego, CA Dec.21, 2015

Disclosure of Patents

In accordance with Sections 3 and 4 of the ATSC Patent Policy, please identify each patent or patent application forming the subject matter of any Potential Claim of which any Representative of the Discloser who is active in an ATSC technology group or specialist group has actual personal knowledge. The Discloser, in good faith, believes that the Potential Claim may be relevant to the implementation of the Specification Document identified by this Disclosure Statement.

No.	Patent/Application Country	Country	Patent/Application Holder	Status [granted/pending]
-	6,707,801	United States	QUALCOMM Incorporated	Granted
	PI0208496-1	Brazil	QUALCOMM Incorporated	Pending
	2442622	Canada	QUALCOMM Incorporated	Granted
	ZL02809330.5	China P.R.	QUALCOMM Incorporated	Granted
	EP1382177	European Patent Convention	QUALCOMM Incorporated	Granted
	EP1382177	Germany	QUALCOMM Incorporated	Granted
	EP1382177	Great Britain	QUALCOMM Incorporated	Granted
	239445	Mexico	QUALCOMM Incorporated	Granted
	10-0940139	Republic of Korea	QUALCOMM Incorporated	Granted
	1571535	Taiwan	QUALCOMM Incorporated	Granted