

QUALCOMM Incorporated

5775 Morehouse Drive San Diego, CA 92121-1714 858-587-1121

www.qualcomm.com

October 26, 2016

Via Email and Federal Express

Attn: Daro Bruno

ATSC

1776 K STREET NW 8th FLOOR WASHINGTON, DC 20006-2304

QUALCOMM Incorporated's IPR Declaration of October 26, 2016 for ATSC Candidate Re: Standard: ATSC Working Draft: ATSC 3.0 Security and Service Protection (\$36-016r12)

Dear Sir,

Enclosed please find Qualcomm Incorporated's IPR Disclosure Statement and Licensing Declaration for ATSC Candidate Standard: ATSC Working Draft: ATSC 3.0 Security and Service Protection (S36-016r12).

Please find attached copies of Qualcomm Incorporated's Patent Statement and Licensing Declaration forms sent to ISO/IEC for the following normative references as cited in ATSC Specification ATSC Candidate Standard: ATSC Working Draft: ATSC 3.0 Security and Service Protection (\$36-016r12):

ISO/IEC: ISO/IEC 14496-12 Fourth edition 2012-07-15 Corrected version 2012-09-15, "Information technology -- Coding of audio-visual objects -- Part 12: ISO base media file format" (normatively referenced in ATSC Working Draft: ATSC 3.0 Security and Service Protection (S36-016r12))

ISO/IEC: "ISO/IEC 23009-1:2014, Information technology — Dynamic adaptive streaming over HTTP (DASH) — Part 1: Media presentation description and segment formats," International Organization for Standardization, Geneva, 2nd Edition, 15 May 2014 (normatively referenced in ATSC Working Draft: ATSC 3.0 Security and Service Protection (\$36-016r12))

Onarcoww.

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 & Legal Counsel

Standards Policy & Compliance

Qualcomm Incorporated

TR/go

ATSC

Title:

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: QUALCOMM Incorporated Name of Participant: Contact Information for Participant's Representative: Thomas R. Rouse, VP & Legal Counsel, Standards Policy and Compliance Thomas R. Rouse, VP & Legal Counsel, Name of Representative: Standards Policy and Compliance 5775 Morehouse Drive, San Diego, CA 92121 Address: Tel. No.: 858-587-1121 858-658-2503 Fax: Email: ip.disclosure@qualcomm.com www.qualcomm.com URL (optional): Identification of ATSC Specification Document relevant to the Disclosure Statement: Number:

ATSC Working Draft: ATSC 3.0 Security and Service Protection (S36-016r12)

If the D Essent Specific	iscloser is the holder of a patent and/or pending patent application that is the subject of an tial 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 ri Rather	ut Compensation: The phrase "without compensation" does not mean that the Discloser is waiving all ights with respect to each patent or patent application that is the subject matter of the Essential Claim r, "without compensation" refers to the issue of monetary compensation; i.e., that the Discloser will sek any monetary compensation as part of the licensing arrangement (whether such compensation ad a royalty, a one-time licensing fee, etc.). However, while the Discloser in this situation is committing

to not charging any monetary amount, the Discloser is still entitled to require that the implementer of the ATSC Specification Document sign a license agreement that contains other reasonable terms and conditions such as those relating to governing law, field of use, reciprocity, warranties, etc.

Reciprocity: As used herein, the word "reciprocity" means that the Discloser shall only be required to license any prospective licensee under the stated terms (without compensation or under reasonable and nondiscriminatory terms and conditions) if such prospective licensee will commit to license its patent(s) or patent application(s) forming the subject matter of an Essential Claim under similar (without compensation or under 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.

	oplication for the Essential Claim.	would
Ti de la constante de la const		
Completed By:		
Name of Participant:	QUALCOMM Incorporated	
Name of Representative:	Thomas R. Rouse	
Title of Representative: Signature:	VP & Legal Counsel, Standards Policy & Compliance	
Place, Date:	San Diego, CA October 26, 2016	

Disclosure of Patents____

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 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 Disclosure Statement.

No	Patent/Application	Country	Patent/Application Holder Status	Status [granted/pending]
_	9,167,280	United States	QUALCOMM Incorporated	Granted
	8,677,504	United States	QUALCOMM Incorporated	Granted
	PI0613730-0	Brazil	QUALCOMM Incorporated	PENDING
	200680032332.1	China P.R.	QUALCOMM Incorporated	PENDING
	06787375.2	European Patent Convention	QUALCOMM Incorporated	PENDING
	259376	India	QUALCOMM Incorporated	Granted
	5479528	Japan	QUALCOMM Incorporated	Granted
	10-1011588	Republic of Korea	QUALCOMM Incorporated	Granted
	2394389	Russian Federation	QUALCOMM Incorporated	Granted

Patent Statement and Licensing Declaration Form for ITU-T/ITU-R Recommendation ISO/IEC Deliverable







Patent Statement and Licensing Declaration for ITU-T/ITU-R Recommendation | ISO/IEC Deliverable

This declaration does not represent an actual grant of a license

Please return to the relevant organization(s) as instructed below per document type: Secretary-General Director Director General Secretary Radiocommunication Bureau International Organization for International Electrotechnical Telecommunication International Telecommunication Standardization Bureau Standardization Commission l Chemin de la Voie-Creuse 3 rue de Varembé International Telecommunication Union Place des Nations CH-1211 Geneva 20 CH-1211 Geneva 20 Union CH-1211 Geneva 20. Place des Nations Switzerland Switzerland Fax: +41 22 919 0300 CH-1211 Geneva 20. Switzerland Fax +41 22 733 3430 Fax: +41 22 730 5785 Email Switzerland Fax: +41 22 730 5853 patent statements a iso org inmail a jec ch Email: brmail gatu int Email: tsbdir.a.itu.iii

Patent Holder:	
Legal Name	QUALCOMM Incorporated
Contact for license a	pplication:
Name & Department	Thomas R. Rouse, VP QTL Patent Counsel
Address	5775 Morehouse Drive
	San Diego, CA 92121
Tel.	858-587-1121
Fax	858-658-2503
E-mail	trouse@qualcomm.com
URL (optional)	qualcomm.com
Document type:	
ITU-T Rec. (*)	ITU-R Rec. (*) ISO Deliverable (*) IEC Deliverable (*)
(please return the form	to the relevant Organization)
	twin text (ITU-T Rec. ISO/IEC Deliverable (*)) (for common text or twin text, please of the three Organizations: ITU-T, ISO, IEC)
ISO/IEC Deliver	rable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)
(*)Number	ISO/IEC 23009-1
(*)Title	Information technology — Dynamic adaptive streaming over HTTP (DASH) — Part 1: Media presentation description and segment formats

Licensing	declaration:	
required t	o implement the abo	at it holds granted and/or pending applications for patents, the use of which would be ve document and hereby declares, in accordance with the Common Patent Policy for check one box only):
	applicants on a wor	t Holder is prepared to grant a <u>free of charge</u> license to an unrestricted number of Idwide, non-discriminatory basis and under other reasonable terms and conditions to implementations of the above document.
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	Also mark he conditions (b whose use we	re if the Patent Holder reserves the right to license on reasonable terms and ut not free of charge) to applicants who are only willing to license their patent claims ould be required to implement the above document, on reasonable terms and ut not free of charge).
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	Also mark here Also mark here document.	if the Patent Holder's willingness to license is conditioned on <u>reciprocity</u> for the above
	3. The Paten above.	t Holder is unwilling to grant licenses in accordance with provisions of either 1 or 2
	In this case, the foll as part of this declar	owing information must be provided to ITU, and is strongly desired by ISO and IEC, ration:
	- granted patent	number or patent application number (if pending);
	- an indication of	which portions of the above document are affected;
	 a description of 	the patent claims covering the above document.
respect to Patent Ho compensa committin of the abo	the essential patent. Ider will not seek and tion is called a royal ag to not charging an over document sign a	ee of charge" do not mean that the Patent Holder is waiving all of its rights with Rather, "free of charge" refers to the issue of monetary compensation; i.e., that the y monetary compensation as part of the licensing arrangement (whether such ty, a one-time licensing fee, etc.). However, while the Patent Holder in this situation is y monetary amount, the Patent Holder is still entitled to require that the implementer icense agreement that contains other reasonable terms and conditions such as those of use, reciprocity, warranties, etc.
any prosp	ective licensee if suc	he word "reciprocity" means that the Patent Holder shall only be required to license h prospective licensee will commit to license its essential patent(s) or essential patent the same above document free of charge or under reasonable terms and conditions.
Signature	e:	
Patent Ho	lder	QUALCOMM Incorporated
Name of	authorized person	Thomas R. Rouse
Title of au	uthorized person	VP, QTL Patent Counsel
Signature		
Place, Da	te	San Diego, California November 9, 2011

FORM: 1 March 2007

2	No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
2	1		.,		
	2				

NOTE:	For option 3,	the additional	minimum	information	that shall	also be j	provided is	listed in	the opti	on 3 box
above.										

Patent Statement and Licensing Declaration Form for ITU-T/ITU-R Recommendation ISO/IEC Deliverable







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Please return to the relevant organization(s) as instructed below per document type:

Director Secretary-General Director General Secretary Radiocommunication Bureau International Organization for International Electrotechnical **Telecommunication** Standardization Bureau International Telecommunication Standardization Commission 1 Chemin de la Voie-Creuse International Telecommunication Union 3 rue de Varembé Place des Nations CH-1211 Geneva 20 CH-1211 Geneva 20 Union Place des Nations CH 1211 Geneva 20, Switzerland Switzerland CH-1211 Geneva 20, Switzerland Fax: +41 22 733 3430 Fax: +41 22 919 0300 Fax: +41 22 730 5785 Email: Email: Switzerland Fax: +41 22 730 5853 patent.statements@iso.org inmail@iec.ch Email: brmail@itu.int Email: tsbdir@itu.int

Patent Holder:	
Legal Name	QUALCOMM Incorporated
Contact for license a	pplication:
Name &	Thomas R. Rouse, VP, Chief Patent Counsel
Department	Legal Department
Address	5775 Morehouse Drive
	San Diego, CA 92121
Tel.	858-651-6732
Fax	858-658-2502
E-mail	trouse@qualcomm.com
URL (optional)	www.qualcomm.com
Document type:	
ITU-T Rec. (*)	ITU-R Rcc. (*) SO Deliverable (*) EC Deliverable (*
(please return the form	n to the relevant Organization)
	twin text (ITU-T Rec. ISO/IEC Deliverable (*)) (for common text or twin text, please h of the three Organizations: ITU-T, ISO, IEC)
ISO/IEC Deliver	rable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)
(*)Number	ISO/IEC 14496-12:2008/FPDAM 1
(*)Title	General improvements including hint tracks, metadata support, and sample groups

Licensing	declaration:	
required to		t it holds granted and/or pending applications for patents, the use of which would be we document and hereby declares, in accordance with the Common Patent Policy for heck <u>one</u> box only):
	applicants on a worl	Holder is prepared to grant a <u>free of charge</u> license to an unrestricted number of dwide, non-discriminatory basis and under other reasonable terms and conditions to implementations of the above document.
	Negotiations are left	t to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC.
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	conditions (b) whose use wo	re if the Patent Holder reserves the right to license on reasonable terms and ut not <u>free of charge</u>) to applicants who are only willing to license their patent claims, puld be required to implement the above document, on reasonable terms and ut not <u>free of charge</u>).
	worldwide, non-disc	Holder is prepared to grant a license to an unrestricted number of applicants on a criminatory basis and on reasonable terms and conditions to make, use and sell the above document.
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	Also mark here 🔯 i document.	f the Patent Holder's willingness to license is conditioned on reciprocity for the above
	3. The Patent above.	Holder is unwilling to grant licenses in accordance with provisions of either 1 or 2
	In this case, the folloas part of this declar	owing information must be provided to ITU, and is strongly desired by ISO and IEC, ration:
	- granted patent r	number or patent application number (if pending);
	- an indication of	which portions of the above document are affected;
	- a description of	the patent claims covering the above document.
respect to Patent Ho compensa committing of the abo	the essential patent. lder will not seek any tion is called a royalt ig to not charging any ve document sign a l	Rather, "free of charge" refers to the issue of monetary compensation; <i>i.e.</i> , that the monetary compensation as part of the licensing arrangement (whether such y, a one-time licensing fee, etc.). However, while the Patent Holder in this situation is monetary amount, the Patent Holder is still entitled to require that the implementer icense agreement that contains other reasonable terms and conditions such as those of use, reciprocity, warranties, etc.
any prosp	ective licensee if sucl	the word "reciprocity" means that the Patent Holder shall only be required to license the prospective licensee will commit to license its essential patent(s) or essential patent the same above document free of charge or under reasonable terms and conditions.
Signature	e:	
Patent Ho	lder	QUALCOMM Incorporated
Name of a	uthorized person	Thomas R. Rouse
Title of au	thorized person	VP, Chief Patent Counsel
Signature		
Place, Da	te	San Diego, CA 12/12/08

FORM: I March 2007

2	No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
2	1				
	2				

NOTE: For option 3, the additional minimum information that shall also be provided is listed in the option 3 box above.
