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 & Legal Counsel, Standards Policy and Compliance

Name of Representative: Thomas R. Rouse, VP & Legal Counsel, Standards Policy and Compliance

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: S33-3-274r7

Title: ATSC Working Draft: Application Signaling
Licensing Declaration

If the Discloser is the holder of a patent and/or pending patent application that is the subject of an Essential Claim, i.e., the use of which it believes would be required to implement the identified ATSC Specification Document, the Discloser hereby declares, in accordance with the Statement on ATSC Patent Policy (see ATSC website), that (check one box only).

<table>
<thead>
<tr>
<th></th>
<th>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.</th>
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<tr>
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<td>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.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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</table>

Without Compensation: The phrase "without compensation" does not mean that the Discloser is waiving all of its rights with respect to each patent or patent application that is the subject matter of the Essential Claim. Rather, "without compensation" refers to the issue of monetary compensation; i.e., that the Discloser will not seek any monetary compensation as part of the licensing arrangement (whether such compensation is called 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.

Completed By:

Name of Participant: QUALCOMM Incorporated

Name of Representative: Thomas R. Rouse

Title of Representative: VP & Legal Counsel, Standards Policy & Compliance

Signature: [Signature]

Place, Date: San Diego, CA January 25, 2017
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.

<table>
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<th>No</th>
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Please return to the relevant organization(s) as instructed below per document type:

Patent Holder: QUALCOMM Incorporated

Contact for license application:
Name & Department: Thomas R. Rouse, VP QTL Patent Counsel
Address: 5775 Morehouse Drive
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. (*)
- [x] ISO Deliverable (*)
- [x] IEC Deliverable (*)

(please return the form to the relevant Organization)

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- [x] ISO/IEC Deliverable (*) (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:
The Patent Holder believes that it holds granted and/or pending applications for patents, the use of which would be required to implement the above document and hereby declares, in accordance with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC, that (check one box only):

☐ 1. The Patent Holder is prepared to grant a free of charge license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and under other reasonable terms and conditions to make, use, and sell implementations of the above document.

Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC.

Also mark here ☐ if the Patent Holder's willingness to license is conditioned on reciprocity for the above document.

Also mark here ☐ if the Patent Holder reserves the right to license on reasonable terms and conditions (but not free of charge) to applicants who are only willing to license their patent claims whose use would be required to implement the above document, on reasonable terms and conditions (but not free of charge).

☒ 2. The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document.

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In this case, the following information must be provided to ITU, and is strongly desired by ISO and IEC, as part of this declaration:
- 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.

Free of charge: The words "free of charge" do not mean that the Patent Holder is waiving all of its rights with respect to the essential patent. Rather, "free of charge" refers to the issue of monetary compensation; i.e., that the Patent Holder will not seek any monetary compensation as part of the licensing arrangement (whether such compensation is called a royalty, a one-time licensing fee, etc.). However, while the Patent Holder in this situation is committing to not charging any monetary amount, the Patent Holder is still entitled to require that the implementer of the above 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.

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Signature:
Patent Holder

Name of authorized person
Thomas R. Rouse

Title of authorized person
VP, OTC Patent Counsel

Signature

Place, Date
San Diego, California
November 9, 2011

FORM: 1 March 2007
<table>
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</table>

**NOTE:** For option 3, the additional minimum information that shall also be provided is listed in the option 3 box above.
December 12, 2008

Via DHL and Email


Dear Director:

Enclosed please find Qualcomm Incorporated’s Patent Statements and Licensing Declarations of December 12, 2008. You will also be receiving a copy via DHL.

Please confirm receipt of this declaration at your earliest convenience via return email jmorgan@qualcomm.com. If you have any questions or concerns regarding these documents, please feel free to contact me directly at any of the contact numbers provided below or return email. Thank you for your assistance with this matter.

Sincerely,

[Signature]

Jeanna M. Morgan
Legal Specialist
Intellectual Property Group
QUALCOMM Legal Department

QUALCOMM Incorporated
5775 Morehouse Dr.
San Diego, CA 92121
Phone - (858) 651-7035
Mobile - (760) 803-6497
http://www.qualcomm.com

Cc: INCITS, ANSI

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

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<th>Director</th>
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<th>Secretary-General</th>
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<tr>
<td>Telecommunication Standardization Bureau International Telecommunication Union</td>
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<td>International Electrotechnical Commission</td>
</tr>
<tr>
<td>Place des Nations CH 1211 Geneva 20, Switzerland</td>
<td>Place des Nations CH 1211 Geneva 20, Switzerland</td>
<td>1 Chemin de la Voie-Creuse CH-1211 Geneva 20 Switzerland</td>
<td>3 rue de Varembe CH-1211 Geneva 20 Switzerland</td>
</tr>
<tr>
<td>Fax: +41 22 730 5853 Email: <a href="mailto:tebedr@itu.int">tebedr@itu.int</a></td>
<td>Fax: +41 22 730 5785 Email: <a href="mailto:hrmail@itu.int">hrmail@itu.int</a></td>
<td>Fax: +41 22 333 3430 Email: <a href="mailto:patent.statements@iso.org">patent.statements@iso.org</a></td>
<td>Fax: +41 22 919 0300 Email: <a href="mailto:inmail@iec.ch">inmail@iec.ch</a></td>
</tr>
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</table>

**Patent Holder:**

<table>
<thead>
<tr>
<th>Legal Name</th>
<th>QUALCOMM Incorporated</th>
</tr>
</thead>
</table>

**Contact for license application:**

<table>
<thead>
<tr>
<th>Name &amp; Legal Department</th>
<th>Thomas R. Rouse, VP, Chief Patent Counsel</th>
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</thead>
<tbody>
<tr>
<td>Address</td>
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<tr>
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</tr>
<tr>
<td>Tel.</td>
<td>858-651-6732</td>
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<tr>
<td>Fax</td>
<td>858-658-2502</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:trous.e@qualcomm.com">trous.e@qualcomm.com</a></td>
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**Document type:**

- [ ] ITU-T Rec. (*)
- [ ] ITU-R Rec. (*)
- [x] ISO Deliverable (*)
- [x] IEC Deliverable (*)

*Please return the form to the relevant Organization*

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[ ] ISO/IEC Deliverable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)

**(* )Number**

ISO/IEC 14996-12:2008/FPDAM 1

**(*)Title**

General improvements including hint tracks, metadata support, and sample groups
Licensing declaration:

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☒ 2. The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document.

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Signature:

QUALCOMM Incorporated

Thomas R. Rouse

VP, Chief Patent Counsel

San Diego, CA 12/12/08

FORM: 1 March 2007
**Patent Information** (desired but not required for options 1 and 2: required in ITU for option 3 (NOTE))

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*for ITU-T or ITU-R Recommendation | ISO or IEC Deliverable*

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<td>Fax +41 22 733 3430 Email <a href="mailto:patent.statement@iso.org">patent.statement@iso.org</a></td>
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<td>Fax +41 22 919 0300 Email <a href="mailto:immr@iec.ch">immr@iec.ch</a></td>
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**Patent Holder:** QUALCOMM Incorporated

**Contact for license application:**

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<td>E-mail</td>
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(please return the form to the relevant Organization)

- [ ] Common text or twin text (ITU-T Rec. | ISO/IEC Deliverable (*) (for common text or twin text, please return the form to each of the three Organizations: ITU-T, ISO, IEC)

**ISO/IEC Deliverable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)**

| (*)Number | ISO/IEC 23008-2:ITU-T HEVC |
| (*)Title | High Efficiency Video Coding |
Licensing declaration:
The Patent Holder believes that it holds granted and/or pending applications for Patents, the use of which would be required to implement the above document and hereby declares, in accordance with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC, that (check one box only):

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Patent: The word “Patent” means those claims contained in and identified by patents, utility models and other similar statutory rights based on inventions (including applications for any of these) solely to the extent that any such claims are essential to the implementation of the same above document. Essential patents are patents that would be required to implement a specific Recommendation | Deliverable.
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☐ Check here if additional patent information is provided on additional pages.

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

**Signature (include on final page only):**
- **Patent Holder:** QUALCOMM Incorporated  
  - **Name of authorized person:** Thomas R. Rouse  
  - **Title of authorized person:** VP, QTL Patent Counsel  
- **Signature:**  
- **Place, Date:** San Diego, California, USA  
  - **Date:** March 2012

**FORM:** 23 April 2012