



QUALCOMM Incorporated

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

www.qualcomm.com

January 5, 2016

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 January 5, 2016 for ATSC Candidate Standard: ATSC Working Draft: Signaling, Delivery, Synchronization, and Error Protection (S33-174r0).

Dear Sir,

Enclosed please find Qualcomm Incorporated's IPR Disclosure Statement and Licensing Declaration for ATSC Candidate Standard: ATSC Working Draft: Signaling, Delivery, Synchronization, and Error Protection (S33-174r0).

Please find attached copies of Qualcomm Incorporated's Intellectual Property Disclosures sent to IETF for the following normative references as cited in ATSC Specification ATSC Candidate Standard: ATSC Working Draft: Signaling, Delivery, Synchronization, and Error Protection (S33-174r0):

IETF: RFC 5053, "Raptor Forward Error Correction Scheme for Object Delivery," Internet Engineering Task Force, Reston, VA, October, 2007 <http://tools.ietf.org/html/rfc5053>

IETF: RFC 6330, "RaptorQ Forward Error Correction Scheme for Object Delivery," Internet Engineering Task Force, Reston, VA, August, 2011.
<http://tools.ietf.org/html/rfc6330>

IETF: RFC 6726, "FLUTE - File Delivery over Unidirectional Transport," Internet Engineering Task Force, Reston, VA, November, 2012. <http://tools.ietf.org/html/rfc6726>



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,

A handwritten signature in black ink, appearing to read 'T. Rouse', with a long horizontal flourish extending to the right.

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: Signaling, Delivery, Synchronization, and Error Protection (S33-174r0).

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).

☐

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.

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.

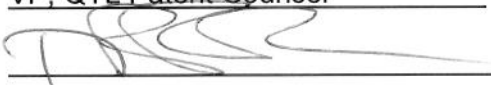
This information is informal in nature and does not constitute a legal opinion, but should be based on "good faith and belief" of the Discloser. Information provided in this section does not represent a formal "notice" that implementation of any resulting ATSC Standard or Recommended Practice would infringe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

Signature: _____

Place, Date: San Diego, CA Jan 5, 2016

	UNKNOWN	Japan	QUALCOMM Incorporated	Pending
	PCT/US2014/042515	Patent Cooperation Treaty	QUALCOMM Incorporated	Pending
5	14/958,086	United States	QUALCOMM Incorporated	Pending
	62/209,620	United States	QUALCOMM Incorporated	Pending
	62/102,930	United States	QUALCOMM Incorporated	Pending
	PCT/US2015/064055	Patent Cooperation Treaty	QUALCOMM Incorporated	Pending
6	104/40802	Taiwan	QUALCOMM Incorporated	Pending
	62/101,236	United States	QUALCOMM Incorporated	Pending
7	13/205,559	United States	QUALCOMM Incorporated	Pending
	AR052701B1	Argentina	QUALCOMM Incorporated	Granted
	201180039437.0	China P.R.	QUALCOMM Incorporated	Pending
	11746402.4	European Patent Convention	QUALCOMM Incorporated	Pending
	1341/CHENP/2013	India	QUALCOMM Incorporated	Pending
	2015-011413	Japan	QUALCOMM Incorporated	Pending
	10-1542310	Republic of Korea	QUALCOMM Incorporated	Granted
	1479882	Taiwan	QUALCOMM Incorporated	Granted
8	13/205,565	United States	QUALCOMM Incorporated	Pending
	AR082614	Argentina	QUALCOMM Incorporated	Granted
	2011289511	Australia	QUALCOMM Incorporated	Granted
	BR1120130026863	Brazil	QUALCOMM Incorporated	Pending
	2807156	Canada	QUALCOMM Incorporated	Pending
	ZL201180039093.3	China P.R.	QUALCOMM Incorporated	Granted
	11748529.2	European Patent Convention	QUALCOMM Incorporated	Pending
	13108752.6	Hong Kong	QUALCOMM Incorporated	Pending
	1387/CHENP/2013	India	QUALCOMM Incorporated	Pending
	W-00201300546	Indonesia	QUALCOMM Incorporated	Pending
	224449	Israel	QUALCOMM Incorporated	Pending
	5612211	Japan	QUALCOMM Incorporated	Granted
	PI2013000395	Malaysia	QUALCOMM Incorporated	Pending
	1-2013-500262	Philippines	QUALCOMM Incorporated	Pending
	10-2015-7020151	Republic of Korea	QUALCOMM Incorporated	Pending
	10-2013-7006118	Republic of Korea	QUALCOMM Incorporated	Pending
	2013110285	Russian Federation	QUALCOMM Incorporated	Pending
	10201505779Q	Singapore	QUALCOMM Incorporated	Pending
	2013/01804	South Africa	QUALCOMM Incorporated	Granted
	I501630	Taiwan	QUALCOMM Incorporated	Granted
	1301000642	Thailand	QUALCOMM Incorporated	Pending

9	107125	Ukraine	QUALCOMM Incorporated	Granted
	135/2013	United Arab Emirates	QUALCOMM Incorporated	Pending
	1-2013-00745	Vietnam	QUALCOMM Incorporated	Pending
	8,806,050	United States	QUALCOMM Incorporated	Granted
	AR082616B1	Argentina	QUALCOMM Incorporated	Granted
	2011289514	Australia	QUALCOMM Incorporated	Granted
	BR1120130026928	Brazil	QUALCOMM Incorporated	Pending
	2807157	Canada	QUALCOMM Incorporated	Pending
	201180039099.0	China P.R.	QUALCOMM Incorporated	Pending
	11746404.0	European Patent Convention	QUALCOMM Incorporated	Pending
	13108751.7	Hong Kong	QUALCOMM Incorporated	Pending
	1057/CHENP/2013	India	QUALCOMM Incorporated	Pending
	W-00201300547	Indonesia	QUALCOMM Incorporated	Pending
	224476	Israel	QUALCOMM Incorporated	Pending
	5559432	Japan	QUALCOMM Incorporated	Granted
	PI 2013000396	Malaysia	QUALCOMM Incorporated	Pending
	1-2013-500209	Philippines	QUALCOMM Incorporated	Pending
	10-1442999	Republic of Korea	QUALCOMM Incorporated	Granted
	2558615	Russian Federation	QUALCOMM Incorporated	Granted
	187638	Singapore	QUALCOMM Incorporated	Granted
	2013/01805	South Africa	QUALCOMM Incorporated	Granted
	1458313	Taiwan	QUALCOMM Incorporated	Granted
	1301000643	Thailand	QUALCOMM Incorporated	Pending
	107394	Ukraine	QUALCOMM Incorporated	Granted
	134/2013	United Arab Emirates	QUALCOMM Incorporated	Pending
	1-2013-00746	Vietnam	QUALCOMM Incorporated	Pending



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Version 4.00, 2012-03-06
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QUALCOMM Incorporated's Statement about IPR related to RFC 5053 (4)

Only those sections of the "Patent Disclosure and Licensing Declaration Template for Specific IPR Disclosures" where the submitter provided information are displayed.

This IPR disclosure updates IPR disclosure ID #1508, "[QUALCOMM Incorporated's Statement about IPR related to RFC 5053 \(3\)](#)".

[Update this IPR disclosure](#). Note: Updates to IPR disclosures must only be made by authorized representatives of the original submitters. Updates will automatically be forwarded to the current Patent Holder's Contact and to the Submitter of the original IPR disclosure.

Submitted Date: April 5, 2012

I. Patent Holder/Applicant ("Patent Holder")

Legal Name: **QUALCOMM Incorporated**

II. Patent Holder's Contact for License Application

Name: **Thomas R. Rouse**
Title: **VP, QTL Patent Counsel**
Department: **Qualcomm Technology Licensing**
Address1: **5775 Morehouse Drive**
Address2: **San Diego, CA 92121**
Telephone: **858-587-1121**
Fax:
Email: **trouse@qualcomm.com**

III. Contact Information for the IETF Participant Whose Personal Belief Triggered this Disclosure:

Name: **Michael Luby**
Title: **VP, Technology**
Department:
Address1:
Address2:
Telephone: **408-533-9434**
Fax:
Email: **luby@qualcomm.com**

IV. IETF Document or Other Contribution to Which this IPR Disclosure Relates:

RFC : **"Raptor Forward Error Correction Scheme for Object Delivery"**

V. Disclosure of Patent Information (i.e., patents or patent applications required to be disclosed by Section 6 of RFC 3979)

A. For granted patents or published pending patent applications, please provide the following information:

Patent, Serial, <http://www.ietf.org/ietf-ftp/IPR/qualcom-ipr-rfc-5053-section-va.txt>
Publication,
Registration, or
Application/File

number(s):

Date(s) granted or applied for: **See Additional Notes below**

Country: **US**

Additional Notes:

Date(s) granted or applied for: 23 Oct 2001; 16 Apr 2002; 02 Sep 2003; 06 Jun 2006; 19 Jun 2007; 23 Apr 2007; 20 Aug 2007; 20 Nov 2001; 10 Jul 2007; 04 Jul 2006; 31 Mar 2009; 12 Feb 2009; 26 Feb 2007; 06 Jun 2000; 27 Jun 2000; 19 Dec 2000; 27 Jun 2006; 13 Feb 2006; 20 Aug 2007; 15 Feb 2005; 18 Apr 2006; 04 Sep 2007; 15 Dec 2009; 21 Jun 2005; 01 Jul 2008; 12 May 2009; 03 Apr 2009; 26 Aug 2008; 25 Aug 2008; 11 Aug 2005; 09 Dec 2008; 06 Nov 2007; 28 Aug 2009.

6,307,487 claims priority to 60/101,473 and has foreign counterparts in AU, CA, DE, EP, FR, GB, HK, IL, IT, JP, KR, and SG.

6,373,406 is a continuation of 6,307,487, which claims priority to 60/101,473.

6,614,366 is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

7,057,534 is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

7,233,264 is a continuation of 7,057,534, which is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

20080034273 is a continuation of 7,233,264, which is a continuation of 7,057,534, which is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

20080180284 is a continuation of 7,233,264, which is a continuation of 7,057,534, which is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

6,320,520 is a continuation-in-part of 6,307,487, which claims priority to 60/101,473 and which has foreign counterparts in AU, CA, DE, EP, FR, GB, IL, JP, and SG.

7,243,285 is a continuation-in-part of 6,614,366 and a continuation-in-part of application 7,068,729, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

7,072,971 claims priority to 60/248,443.

7,512,697 is a continuation of 7,072,971, which claims priority to 60/248,443.

20090210547 is a continuation of 7,512,697, which is a continuation of 7,072,971, which claims priority to 60/248,443.

20070233891 is a continuation of 09/882,508, which claims priority to 60/274,445, and which has foreign counterparts in TW.

7,068,729 has foreign counterparts in CN, EP, IN, JP, KR, and TW.

20060262877 is a continuation of 7,068,729.

20080309525 is a continuation of 20060262877, which is a continuation of 7,068,729.

6,856,263 claims priority to 60/388,129 and has foreign counterparts in CN, EP, HK, IN, JP, KR.

7,030,785 is a continuation of 6,856,263, which claims priority to 60/388,129.

7,265,688 is a continuation of 7,030,785, which is a continuation of 6,856,263, which claims priority to 60/388,129.

7,633,413 is a continuation of 7,265,688, which is a continuation of 7,030,785, which is a continuation of 6,856,263, which claims priority to 60/388,129.

6,909,383 claims priority to 60/319,597 and has foreign counterparts in CN, EP, HK, IN, JP, and KR.

7,394,407 is a continuation of 6,909,383, which claims priority to 60/319,597.

7,532,132 is a continuation of 6,909,383, which claims priority to 60/319,597.

20090189792 is a continuation of 7,532,132, which is a continuation of 6,909,383, which claims priority to 60/319,597.

7,418,651 claims priority to 60/569,127 and has foreign counterparts in CN, EP, HK, IN, JP, and KR.
20090031199 is a continuation of 7,418,651, which claims priority to 60/569,127.
20060036930 claims priority to 60/600,932.
12/331,268 is a divisional of 20060036930, which claims priority to 60/600,932.
7,293,222 claims priority to 60/443,477.
12/549,560 claims priority to 61/235,285 and is a continuation-in-part of 7,633,413.

B. Does this disclosure relate to an unpublished pending patent application?: **YES**

C. If an Internet-Draft or RFC includes multiple parts and it is not reasonably apparent which part of such Internet-Draft or RFC is alleged to be covered by the patent information disclosed in Section V(A) or V(B), it is helpful if the discloser identifies here the sections of the Internet-Draft or RFC that are alleged to be so covered:

No information submitted

VI. Licensing Declaration

The Patent Holder states that its position with respect to licensing any patent claims contained in the patent(s) or patent application(s) disclosed above that would necessarily be infringed by implementation of the technology required by the relevant IETF specification ("Necessary Patent Claims"), for the purpose of implementing such specification, is as follows(select one licensing declaration option only):

See Text Below for Licensing Declaration.

Licensing information, comments, notes, or URL for further information:

If the technology in RFC5053 "Raptor Forward Error Correction Scheme for Object Delivery" is included in a standards track or experimental document adopted by the IETF, and any claim of any patent issued from the above mentioned patents, patent applications or corresponding patents and patent applications is required for the implementation of any device that (a) fully implements such adopted standards track or experimental document; and (b) implements a wireless wide-area standard (for example, a UMTS-compatible handset or Infrastructure equipment), Qualcomm will offer licenses to such claim as part of its established licensing terms and conditions for such products, without charging any additional incremental royalty rate above Qualcomm's standard royalty rate for use of its patents in such products implementing such wireless wide-area standard.

If the technology in RFC5053 "Raptor Forward Error Correction Scheme for Object Delivery" is included in a standards track or experimental document adopted by the IETF, and any claim of any patent issued from the above mentioned patents, patent applications or corresponding patents and patent applications is required for the implementation of any device that (a) fully implements such adopted standards track or experimental document; and (b) does not implement any wireless wide-area standard, Qualcomm will not assert any such claim against any party for making, using, selling, importing or offering for sale such product but solely with respect to the implementation of such adopted standards track or experimental document, provided, however that Qualcomm retains the right to assert its patent(s) issued on the above mentioned application or corresponding patent applications (including the right to claim past royalties) against any party that asserts a patent it owns or controls (either directly or indirectly) against any products of Qualcomm or any products of any of Qualcomm's Affiliates either alone or in combination with other products; and Qualcomm retains the right to assert its patents or application(s) against any product or portion thereof that is not required to implement the IETF standards track or experimental document.

Note: The individual submitting this template represents and warrants that he or she is authorized by the Patent Holder to agree to the above-selected licensing declaration.

VII. Contact Information of Submitter of this Form (if different from the Contact Information above)

Name: **Thomas R. Rouse**
Title: **VP, QTL Patent Counsel**
Department: **Qualcomm Technology Licensing**
Address1: **5775 Morehouse Drive**
Address2: **San Diego, CA 92121**
Telephone: **858-587-1121**
Fax:
Email: **trouse@qualcomm.com**

VIII. Other Notes:

Qualcomm Incorporated has acquired Digital Fountain and all owned IPR. This declaration updates the previous declaration dated September 8, 2009, which superseded the prior declaration made by Digital Fountain on June 29, 2006 (<https://datatracker.ietf.org/ipr/734/>), which updated their declaration of March 16, 2006 (<https://datatracker.ietf.org/ipr/702/>).

QUALCOMM Incorporated's Statement about IPR related to RFC 5053 (3)

Only those sections of the "Patent Disclosure and Licensing Declaration Template for Specific IPR Disclosures" where the submitter provided information are displayed.

This IPR disclosure updates IPR disclosure ID #1289, "[QUALCOMM Incorporated's Statement about IPR related to RFC 5053 \(2\)](#)".

Update this IPR disclosure. Note: Updates to IPR disclosures must only be made by authorized representatives of the original submitters. Updates will automatically be forwarded to the current Patent Holder's Contact and to the Submitter of the original IPR disclosure.

Submitted Date: March 8, 2011

I. Patent Holder/Applicant ("Patent Holder")

Legal Name: **QUALCOMM Incorporated**

II. Patent Holder's Contact for License Application

Name: **Thomas R. Rouse**
Title: **VP, QTL Patent Counsel**
Department: **Qualcomm Technology Licensing**
Address1: **5775 Morehouse Drive**
Address2: **San Diego, CA 92121**
Telephone: **858-587-1121**
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III. Contact Information for the IETF Participant Whose Personal Belief Triggered this Disclosure:

Name: **Michael Luby**
Title: **VP, Technology**
Department:
Address1:
Address2:
Telephone: **408-533-9434**
Fax:
Email: **luby@qualcomm.com**

IV. IETF Document or Other Contribution to Which this IPR Disclosure Relates:

RFC 5053: "Raptor Forward Error Correction Scheme for Object Delivery"

V. Disclosure of Patent Information (i.e., patents or patent applications required to be disclosed by Section 6 of RFC 3979)

A. For granted patents or published pending patent applications, please provide the following information:

Patent, Serial, **<http://www.ietf.org/ietf-ftp/IPR/qualcom-ipr-rfc-5053-section-va.txt>**
Publication,
Registration, or

Application/File
number(s):

Date(s) granted or
applied for:

Country:

Additional Notes:

See Additional Notes below

US

Date(s) granted or applied for: 23 Oct 2001; 16 Apr 2002; 02 Sep 2003; 06 Jun 2006; 19 Jun 2007; 23 Apr 2007; 20 Aug 2007; 20 Nov 2001; 10 Jul 2007; 04 Jul 2006; 31 Mar 2009; 12 Feb 2009; 26 Feb 2007; 06 Jun 2000; 27 Jun 2000; 19 Dec 2000; 27 Jun 2006; 13 Feb 2006; 20 Aug 2007; 15 Feb 2005; 18 Apr 2006; 04 Sep 2007; 15 Dec 2009; 21 Jun 2005; 01 Jul 2008; 12 May 2009; 03 Apr 2009; 26 Aug 2008; 25 Aug 2008; 11 Aug 2005; 09 Dec 2008; 06 Nov 2007; 28 Aug 2009.

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No information submitted

VI. Licensing Declaration

The Patent Holder states that its position with respect to licensing any patent claims contained in the patent(s) or patent application(s) disclosed above that would necessarily be infringed by implementation of the technology required by the relevant IETF specification ("Necessary Patent Claims"), for the purpose of implementing such specification, is as follows(select one licensing declaration option only):

See Text Below for Licensing Declaration.

Licensing information, comments, notes, or URL for further information:

If the technology in RFC5053 "Raptor Forward Error Correction Scheme for Object Delivery" is included in a standards track or experimental document adopted by the IETF, and any claim of any patent issued from the above mentioned patents, patent applications or corresponding patents and patent applications is required for the implementation of any broadcast/multicast object delivery product that (a) fully implements such adopted standards track or experimental document; and (b) implements a wireless wide-area standard (for example, a UMTS-compatible handset or Infrastructure equipment), Qualcomm will offer licenses to such claim as part of its established licensing terms and conditions for such products, without charging any additional incremental royalty rate above Qualcomm's standard royalty rate for use of its patents in such products implementing such wireless wide-area standard.

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Email: **trouse@qualcomm.com**

VIII. Other Notes:

**Qualcomm Incorporated has acquired Digital Fountain and all owned IPR.
This declaration updates the previous declaration dated September 8, 2009, which superseded the prior declaration made by Digital Fountain on June 29, 2006 (<https://datatracker.ietf.org/ipr/734/>), which updated their declaration of March 16, 2006 (<https://datatracker.ietf.org/ipr/702/>).**

V. Disclosure of Patent Information (i.e., patents or patent applications required to be disclosed by Section 6 of RFC 3979)

A. For granted patents or published pending patent applications, please provide the following information:

Patent, Serial, Publication, Registration, or Application/File number(s) :

6,307,487; 6,373,406; 6,614,366; 7,057,534; 7,233,264; 20080034273; 20080180284; 6,320,520;
7,243,285; 7,072,971; 7,512,697; 20090210547; 20070233891; 6,073,250; 6,081,909; 6,163,870;
7,068,729; 20060262877; 20080309525; 6,856,263; 7,030,785; 7,265,688; 7,633,413; 6,909,383;
7,394,407; 7,532,132; 20090189792; 7,418,651; 20090031199; 20060036930; 20090307565; 7,293,222;
12/549,560



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Submitted Date: September 8, 2009

I. Patent Holder/Applicant ("Patent Holder")

Legal Name: **QUALCOMM Incorporated**

II. Patent Holder's Contact for License Application

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III. Contact Information for the IETF Participant Whose Personal Belief Triggered this Disclosure:

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 Fax:
 Email: **luby@qualcomm.com**

IV. IETF Document or Other Contribution to Which this IPR Disclosure Relates:

RFC 5053: "Raptor Forward Error Correction Scheme for Object Delivery"

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A. For granted patents or published pending patent applications, please provide the following information:

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Date(s) granted or applied for: **See Additional Notes below**

Country: **US**

Additional Notes: **Date(s) granted or applied for: 10/23/01; 11/20/01; 4/16/02; 9/2/03; 6/6/06; 6/19/07; 4/23/07; 4/20/07; 7/10/07; 7/4/06; 3/31/09; 2/12/09; 2/26/07; 6/6/00; 6/27/00; 12/19/00; 6/27/06; 2/13/06; 8/20/07; 2/15/05; 4/18/06; 9/4/07; 8/20/07; 6/21/05; 7/1/08; 5/12/09; 4/3/09; 8/26/08; 8/25/08; 8/11/05; 12/9/08**

6,307,487 claims priority to 60/101,473 and has foreign counterparts in AU, CA, DE, EP, FR, GB, HK, IL, IT, JP, KR, and SG.

6,320,520 is a continuation-in-part of 6,307,487, which claims priority to 60/101,473 and which has foreign counterparts in US, AU, CA, DE, EP, FR, GB, IL, JP, and SG.

6,373,406 is a continuation of 6,307,487, which claims priority to 60/101,473.

6,614,366 is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

7,057,534 is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

7,233,264 is a continuation of 7,057,534, which is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

20080034273 is a continuation of 7,233,264, which is a continuation of 7,057,534, which is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

20080180284 is a continuation of 7,233,264, which is a continuation of 7,057,534, which is a continuation of 6,614,366, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473.

"7,243,285 is a continuation-in-part of 6,614,366 and a continuation-in-part of application 7,068,729, which is a continuation of 6,373,406, which is a continuation of 6,307,487, which claims priority to 60/101,473."

7,072,971 claims priority to 60/248,443.

7,512,697 is a continuation of 7,072,971, which claims priority to 60/248,443.

20090210547 is a continuation of 7,512,697, which is a continuation of 7,072,971, which claims priority to 60/248,443.

20070233891 is a continuation of 09/882,508, which claims priority to 60/274,445, and which has foreign counterparts in TW.

7,068,729 has foreign counterparts in CN, EP, IN, JP, KR, and TW.

20060262877 is a continuation of 7,068,729.

20080309525 is a continuation of 20060262877, which is a continuation of 7,068,729.

6,856,263 claims priority to 60/388,129 and has foreign counterparts in CN, EP, HK, IN, JP, KR.

7,030,785 is a continuation of 6,856,263, which claims priority to 60/388,129.

7,265,688 is a continuation of 7,030,785, which is a continuation of 6,856,263, which claims priority

to 60/388,129.

20080169945 is a continuation of 7,265,688, which is a continuation of 7,030,785, which is a continuation of 6,856,263, which claims priority to 60/388,129.

6,909,383 claims priority to 60/319,597 and has foreign counterparts in CN, EP, HK, IN, JP, and KR.

7,394,407 is a continuation of 6,909,383, which claims priority to 60/319,597.

7,532,132 is a continuation of 6,909,383, which claims priority to 60/319,597.

20090189792 is a continuation of 7,532,132, which is a continuation of 6,909,383, which claims priority to 60/319,597.

7,418,651 claims priority to 60/569,127 and has foreign counterparts in CN, EP, HK, IN, JP, and KR.

20090031199 is a continuation of 7,418,651, which claims priority to 60/569,127.

20060036930 claims priority to 60/600,932.

12/331,268 is a divisional of 20060036930, which claims priority to 60/600,932.

B. Does this disclosure relate to an unpublished pending patent application?: YES

C. If an Internet-Draft or RFC includes multiple parts and it is not reasonably apparent which part of such Internet-Draft or RFC is alleged to be covered by the patent information disclosed in Section V(A) or V(B), it is helpful if the discloser identifies here the sections of the Internet-Draft or RFC that are alleged to be so covered:

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The Patent Holder states that its position with respect to licensing any patent claims contained in the patent(s) or patent application(s) disclosed above that would necessarily be infringed by implementation of the technology required by the relevant IETF specification ("Necessary Patent Claims"), for the purpose of implementing such specification, is as follows(select one licensing declaration option only):

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VII. Contact Information of Submitter of this Form (if different from the Contact Information above)

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VIII. Other Notes:

Qualcomm Incorporated has acquired Digital Fountain and all owned IPR. As such, this declaration supersedes the previous declaration made by Digital Fountain on June 29, 2006 (<https://datatracker.ietf.org/ipr/734/>), which updated their declaration of March 16, 2006 (<https://datatracker.ietf.org/ipr/702/>).

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Updates:

QUALCOMM Incorporated's Statement about IPR related to RFC 6330 <2013-02-06>

x

'I'. Patent Holder/Applicant ("Patent Holder")

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'II'. Patent Holder's Contact for License Application

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(address,phone,etc)

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Designations for
Other Contributions:

'V'. Disclosure of Patent Information (i.e., patents or patent applications required to be disclosed by Section 6 of RFC3979)

A. For granted patents or published pending patent applications, please provide the following information:

Patent, Serial, US20110299629
Publication, Date: 08/18/2010
Registration, or Country: US
Application/File Notes: US20110299629 is a continuation-in-part of 12/604,773 and
number(s), Date(s) claims priority to 61/235,285, 61/353,910, and 61/257,146 and has
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"VII". Contact Information of Submitter of this Form (if different from the Contact Information above)

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"VIII". Other Notes:

Qualcomm Incorporated has acquired Digital Fountain and all owned IPR.

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Fields marked with "*" are required.

I. Patent Holder/Applicant ("Patent Holder")

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Fax:

Email: presnick@qti.qualcomm *

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RFC Numbers: 6726

I-D Filenames (draft-...):

Designations for
Other Contributions:

V. Disclosure of Patent Information (i.e., patents or patent applications required to be disclosed by Section 6 of RFC3979)

A. For granted patents or published pending patent applications, please provide the following information:

Patent, Serial,
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Application/File
number(s):

7,693,508

*

Date(s) granted or
applied for:

04/06/2010

*

Country:

US

*

Additional Notes:

7,693,508 claims priority to 60/279,970
and has foreign counterparts in BR,
CN, EP, JP, KR, NO, TW

B. Does your disclosure relate to an unpublished pending patent application?:

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☒ NO

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VII. Contact Information of Submitter of this Form (if different from the Contact Information above)

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VIII. Other Notes:

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