UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HULU, LLC, and
NETFLIX, INC.,
Petitioners,

v.

UNILOC 2017 LLC,
Patent Owner.

PTAB Case No. IPR2020-00008

PTAB Case No. IPR2020-00008

Patent No. 9,721,273

DECLARATION OF JACOB MUNFORD IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,721,273

- I, Jacob Munford, declare under penalty of perjury that:
 - 1. My name is Jacob Robert Munford. I am over the age of 18, have personal knowledge of the facts set forth herein, and am competent to testify to the same.
 - 2. I earned a Master of Library and Information Science (MLIS) from the University of Wisconsin-Milwaukee in 2009. I have over ten years of experience in the library/information science field. Beginning in 2004, I have served in various positions in the public library sector including Assistant Librarian, Youth Services Librarian and Library Director. I have attached my Curriculum Vitae as Appendix A.
 - 3. During my career in the library profession, I have been responsible for materials acquisition for multiple libraries. In that position, I have cataloged, purchased and processed incoming library works. That includes purchasing materials directly from vendors, recording publishing data from the material in question, creating detailed material records for library catalogs and physically preparing that material for circulation. In addition to my experience in acquisitions, I was also responsible for analyzing large collections of library materials, tailoring library records for optimal catalog search performance and creating lending agreements between libraries during my time as a Library Director.

- 4. I am fully familiar with the catalog record creation process in the library sector. In preparing a material for public availability, a library catalog record describing that material would be created. These records are typically written in Machine Readable Catalog (herein referred to as "MARC") code and contain information such as a physical description of the material, metadata from the material's publisher, and date of library acquisition. In particular, the 008 field of the MARC record is reserved for denoting the date of creation of the library record itself. As this typically occurs during the process of preparing materials for public access, it is my experience that an item's MARC record indicates the date of an item's public availability.
- 5. I have reviewed Exhibit 1006, Developing Feeds with RSS and Atom, by Ben Hammersley, published by O'Reilly, 2005.
- 6. Attached hereto as HA01 is a true and correct copy of the spine, publication data, title page and table of contents from Developing Feeds with RSS and Atom held by the University of Pittsburgh library. I secured this appendix myself in person. In comparing HA01 to Exhibit 1006, it is my determination that Exhibit 1006 is a true and correct copy of Developing Feeds with RSS and Atom.
- 7. Attached hereto as HA02 is a true and correct copy of the MARC record describing Developing Feeds with RSS and Atom as held by the University

of Pittsburgh. I secured this record myself from the library's online catalog. The 008 field of this MARC record indicates Developing Feeds with RSS and Atom was first acquired by the University of Pittsburgh library as of May 13, 2005.

- 8. The date stamp on page 12 of HA01 indicates this journal was processed by library staff for circulation as of October 7, 2005. The Date Due slip on page 13 of HA01 indicates this journal was circulated to a library patron as of March 7, 2006. Considering this information in concert with the record data from HA02, it is my determination that Developing Feeds with RSS and Atom was made available and accessible to the public by the University of Pittsburgh library shortly after initial acquisition in May 2005 and certainly no later than March 2006.
- 9. I have been retained on behalf of the Petitioners to provide assistance in the above-illustrated matter in establishing the authenticity and public availability of the documents discussed in this declaration. I am being compensated for my services in this matter at the rate of \$100.00 per hour plus reasonable expenses. My statements are objective, and my compensation does not depend on the outcome of this matter.
- 10.I do hereby declare and state, that all statements made herein of my own knowledge are true, and that all statements made on information and belief

are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed at Pittsburgh, Pennsylvania on October 10, 2019.

By:

Jacob Munford

APPENDIX A

Appendix A - Curriculum Vitae

Education

University of Wisconsin-Milwaukee - MS, Library & Information Science, 2009 Milwaukee, WI

- Coursework included cataloging, metadata, data analysis, library systems, management strategies and collection development.
- Specialized in library advocacy and management.

Grand Valley State University - BA, English Language & Literature, 2008 Allendale, MI

- Coursework included linguistics, documentation and literary analysis.
- Minor in political science with a focus in local-level economics and government.

Professional Experience

Researcher / Expert Witness, October 2017 – present Freelance

Pittsburgh, Pennsylvania

- Material authentication and public accessibility determination. Declarations
 of authenticity and/or public accessibility provided upon research
 completion. Depositions provided on request.
- Research provided on topics of public library operations, material publication history, digital database services and legacy web resources.
- Past clients include Apple, Fish & Richardson, Erise IP, Baker Botts and other firms working in patent law.

Library Director, February 2013 - March 2015 Dowagiac District Library Dowagiac, Michigan

• Executive administrator of the Dowagiac District Library. Located in Southwest Michigan, this library has a service area of 13,000, an annual

- operating budget of over \$400,000 and total assets of approximately \$1,300,000.
- Developed careful budgeting guidelines to produce a 15% surplus during the 2013-2014 & 2014-2015 fiscal years.
- Using this budget surplus, oversaw significant library investments including the purchase of property for a future building site, demolition of existing buildings and building renovation projects on the current facility.
- Led the organization and digitization of the library's archival records.
- Served as the public representative for the library, developing business relationships with local school, museum and tribal government entities.
- Developed an objective-based analysis system for measuring library services including a full collection analysis of the library's 50,000+ circulating items and their records.

November 2010 - January 2013 Librarian & Branch Manager, Anchorage Public Library Anchorage, Alaska

- Headed the 2013 Anchorage Reads community reading campaign including event planning, staging public performances and creating marketing materials for mass distribution.
- Co-led the social media department of the library's marketing team, drafting social media guidelines, creating original content and instituting long-term planning via content calendars.
- Developed business relationships with The Boys & Girls Club, Anchorage School District and the US Army to establish summer reading programs for children.

June 2004 - September 2005, September 2006 - October 2013 Library Assistant, Hart Area Public Library Hart, MI

- Responsible for verifying imported MARC records and original MARC cataloging for the local-level collection as well as the Michigan Electronic Library.
- Handled OCLC Worldcat interlibrary loan requests & fulfillment via ongoing communication with lending libraries.

Professional Involvement

Alaska Library Association - Anchorage Chapter

• Treasurer, 2012

Library Of Michigan

- Level VII Certification, 2008
- Level II Certification, 2013

Michigan Library Association Annual Conference 2014

• New Directors Conference Panel Member

Southwest Michigan Library Cooperative

• Represented the Dowagiac District Library, 2013-2015

Professional Development

Library Of Michigan Beginning Workshop, May 2008 Petoskey, MI

• Received training in cataloging, local history, collection management, children's literacy and reference service.

Public Library Association Intensive Library Management Training, October 2011 Nashville, TN

• Attended a five-day workshop focused on strategic planning, staff management, statistical analysis, collections and cataloging theory.

Alaska Library Association Annual Conference 2012 - Fairbanks, February 2012 Fairbanks, AK

• Attended seminars on EBSCO advanced search methods, budgeting, cataloging, database usage and marketing.

APPENDIX HA01

Developer's Guide to Syndicating News and Blogs





RSS and Atom

HILL QA76.625

H366 2005

REILLY[®]

Ben Hammersley HULU, LLC EXHIBIT 1009





O'REILLY®

Developing Feeds with RSS and Atom



RSS and Atom are among the fastest-growing technologies on the Web. The RSS 1.0 and 2.0 standards and the up-and-coming Atom are XML-based formats that help web developers to describe and syndicate web site content, application developers to share data, scripters to repurpose information, businessmen to stay on top of their world, and consumers to tap into the Internet in a whole new way.

Developing Feeds with RSS and Atom offers webloggers, web developers, and the programmers who support them an explanation of syndication in general and RSS and Atom in particular. Written for web developers who want to offer feeds of their content, as well as developers who

want to use the content other people are syndicating, the book explores and explains metadata interpretation, different forms of syndication, and the role of Web Services and the Semantic Web.

This comprehensive volume introduces content syndication's purpose, limitations, and traditions, and answers the question of "why would you consider 'giving your content away' like this?" The book delves into the architecture of content syndication with an overview of the entire system, from content author to end user. You'll follow the flow of data: content, referral data, and publishand-subscribe calls, with a detailed look at the protocols and standards possible at each step. You'll understand the specifications and learn how to use them to their limits.

Topics covered in this book include:

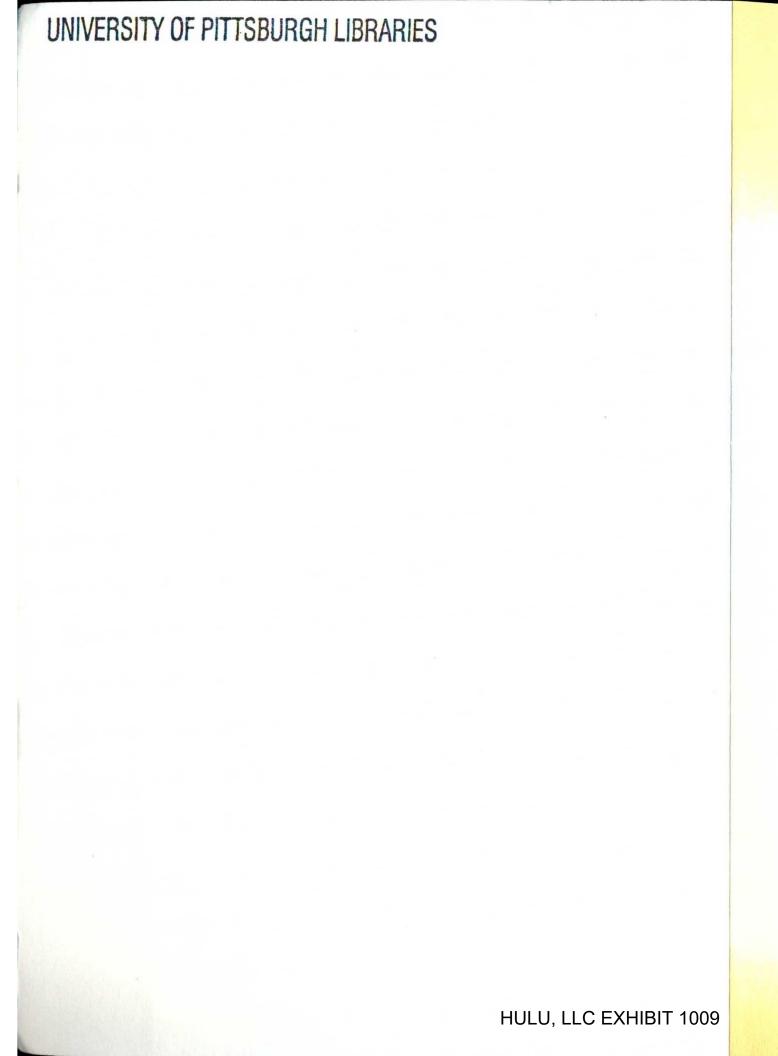
- Creating XML syndication feeds with RSS 2.0
- Producing feeds in the enterprise
- Moving toward the Semantic Web with RSS 1.0 and RDF metadata
- **Introducing Atom**
- Extending your vocabulary: an extensive guide to RSS modules and their design
- Parsing syndication feeds
- Designing architectures for content syndication

If you're interested in producing your own feeds, using other people's, or keeping up-to-date with the latest web technologies, you'll want this step-by-step guide to RSS and Atom and their implementation.

www.oreilly.com







Developing Feeds with RSS and Atom

Other resources from O'Reilly

Related titles XML Hacks™

We the Media

XML in a Nutshell

Essential Blogging

Learning XML

Running Weblogs with Slash

Google Hacks™

Practical RDF

oreilly.com

oreilly.com is more than a complete catalog of O'Reilly books. You'll also find links to news, events, articles, weblogs, sample chapters, and code examples.



oreillynet.com is the essential portal for developers interested in open and emerging technologies, including new platforms, programming languages, and operating systems.

Conferences

O'Reilly brings diverse innovators together to nurture the ideas that spark revolutionary industries. We specialize in documenting the latest tools and systems, translating the innovator's knowledge into useful skills for those in the trenches. Visit *conferences.oreilly.com* for our upcoming events.



Safari Bookshelf (*safari.oreilly.com*) is the premier online reference library for programmers and IT professionals. Conduct searches across more than 1,000 books. Subscribers can zero in on answers to time-critical questions in a matter of seconds. Read the books on your Bookshelf from cover to cover or simply flip to the page you need. Try it today with a free trial.

Developing Feeds with RSS and Atom

Ben Hammersley

Developing Feeds with RSS and Atom

by Ben Hammersley

Copyright © 2005 O'Reilly Media, Inc. All rights reserved. Printed in the United States of America.

Published by O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472.

O'Reilly books may be purchased for educational, business, or sales promotional use. Online editions are also available for most titles (*safari.oreilly.com*). For more information, contact our corporate/institutional sales department: (800) 998-9938 or *corporate@oreilly.com*.

Editor:

Simon St.Laurent

Production Editor:

Mary Anne Weeks Mayo

Cover Designer:

Ellie Volckhausen

Interior Designer:

David Futato

Printing History:

April 2005:

First Edition, with content from Content Syndication with RSS.

Nutshell Handbook, the Nutshell Handbook logo, and the O'Reilly logo are registered trademarks of O'Reilly Media, Inc. *Developing Feeds with RSS and Atom*, the image of an American kestrel, and related trade dress are trademarks of O'Reilly Media, Inc.

Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and O'Reilly Media, Inc. was aware of a trademark claim, the designations have been printed in caps or initial caps.

While every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions, or for damages resulting from the use of the information contained herein.



This book uses RepKover, a durable and flexible lay-flat binding.

ISBN: 0-596-00881-3

[M]

Table of Contents

refa	nce	ix
1.	Introduction	1
	What Are RSS and Atom for?	1
	A Short History of RSS and Atom	2
	Why Syndicate Your Content?	11
	Legal Implications	12
2.	Using Feeds	13
	Web-Based Applications	13
	Desktop Applications	16
	Other Cunning Techniques	17
	Finding Feeds to Read	19
3.	Feeds Without Programming	21
	From Email	21
	From a Search Engine	22
	From Online Stores	24
4.	RSS 2.0	
	Bringing Things Up to Date	25
	The Basic Structure	26
	Producing RSS 2.0 with Blogging Tools	34
	Introducing Modules	36
	Creating RSS 2.0 Feeds	43

5.	RSS 1.0	51
	Metadata in RSS 2.0	51
	Resource Description Framework	56
	RDF in XML	59
	Introducing RSS 1.0	64
	The Specification in Detail	67
	Creating RSS 1.0 Feeds	72
6.	RSS 1.0 Modules	77
	Module Status	77
	Support for Modules in Common Applications	78
	Other RSS 1.0 Modules	114
7.	The Atom Syndication Format	115
	Introducing Atom	115
	The Atom Entry Document in Detail	123
	Producing Atom Feeds	129
8.	Parsing and Using Feeds	130
	Important Issues	130
	JavaScript Display Parsers	132
	Parsing for Programming	135
	Using Regular Expressions	147
	Using XSLT	148
	Client-Side Inclusion	150
	Server-Side Inclusion	150
9.	Feeds in the Wild	154
	Once You Have Created Your Simple RSS Feed	154
	Publish and Subscribe	160
	Rolling Your Own: LinkPimp PubSub	163
	LinkpimpClient.pl	164
10.	Unconventional Feeds	179
	Apache Logfiles	179
	Code TODOs to RSS	182
	Daily Doonesbury	184
	Amazon.com Wishlist to RSS	186
	FedEx Parcel Tracker	190

	Google to RSS with SOAP	196
	Last-Modified Files	198
	Installed Perl Modules	200
	The W3C Validator to RSS	202
	Game Statistics to Excel	204
	Feeds by SMS	205
	Podcasting Weather Forecasts	208
	Having Amazon Produce Its Own RSS Feeds	211
	Cross-Poster for Movable Type	212
11.	Developing New Modules	218
	Namespaces and Modules Within RSS 2.0 and Atom	218
	Case Study: mod_Book	219
	Extending Your Desktop Reader	225
	Introducing AmphetaDesk	225
A.	The XML You Need for RSS	231
В.	Useful Sites and Software	242
Indo		247

Keep in touch with O'Reilly

1. Download examples from our books

To find example files for a book, go to: www.oreilly.com/catalog select the book, and follow the "Examples" link.

2. Register your O'Reilly books

Register your book at register.oreilly.com

Why register your books?

Once you've registered your O'Reilly books you can:

- Win O'Reilly books, T-shirts or discount coupons in our monthly drawing.
- Get special offers available only to registered O'Reilly customers.
- Get catalogs announcing new books (US and UK only).
- Get email notification of new editions of the O'Reilly books you own.

3. Join our email lists

Sign up to get topic-specific email announcements of new books and conferences, special offers, and O'Reilly Network technology newsletters at:

elists.oreilly.com

It's easy to customize your free elists subscription so you'll get exactly the O'Reilly news you want.

4. Get the latest news, tips, and tools

www.oreilly.com

- "Top 100 Sites on the Web"—PC Magazine
- CIO Magazine's Web Business 50 Awards

Our web site contains a library of comprehensive product information (including book excerpts and tables of contents), downloadable software, background articles, interviews with technology leaders, links to relevant sites, book cover art, and more.

5. Work for O'Reilly

Check out our web site for current employment opportunities:

jobs.oreilly.com

6. Contact us

O'Reilly Media 1005 Gravenstein Hwy North Sebastopol, CA 95472 USA

TEL: 707-827-7000 or 800-998-9938

(6am to 5pm PST)

FAX: 707-829-0104

order@oreilly.com

For answers to problems regarding your order or our products. To place a book order online, visit: www.oreilly.com/order_new

catalog@oreilly.com

To request a copy of our latest catalog.

booktech@oreilly.com

For book content technical questions or corrections.

corporate@oreilly.com

For educational, library, government, and corporate sales.

proposals@oreilly.com

To submit new book proposals to our editors and product managers.

international@oreilly.com

For information about our international distributors or translation queries. For a list of our distributors outside of North America check out:

international.oreilly.com/distributors.html

adoption@oreilly.com

For information about academic use of O'Reilly books, visit:

academic.oreilly.com

O'REILLY®

MAR	0 7	200	5		
Di	C .	h ZU	118		
			90		
		OCT	3 1	200	8

APPENDIX HA02

E-Z Borrow Help Find Articles Other Libraries Ask Us Library Home Page

New Search: Go Search History

> **Authors** Titles

Prev 2 of 3 Next

Developing feeds with RRS and Atom /

000 01735cam a2200301Ka 4500

001 4530701

005 20071012130417.0

008 050513s2005 ch 001 0 eng d

020 __ |a 0596008813

035 ___ |a (OCoLC)ocm60361823

035 __ |a 4530701

040 __ |a VYR |c VYR |d OrLoB-B |d UtOrBLW

049 __ |a PITT

090 ___ | **a** QA76.625 | **b** .H366 2005 **100** 1_ | **a** Hammersley, Ben.

245 10 | a Developing feeds with RRS and Atom / | c Ben Hammersley.

250 | **a** 1st ed.

260 ___ | **a** Beijing : | **a** Sebastopol, CA : | **b** O'Reilly, | **c** c2005.

300 __ |**a** xiii, 253 p. : |**b** ill. ; |**c** 24 cm.

_ |**a** Includes index. 500

505 00

| g 1. | t Introduction -- | g 2. | t Using feeds -- | g 3. | t Feeds without programming -- | g 4. | t RSS 2.0 -- | g 5. | t RSS 1.0 -- | g 6. | t RSS 1.0 modules -- | g 7. | t atom syndication format -- | g 8. | t Parsing and using feeds -- |g 9. |t Feeds in the wild -- |g 10. |t Unconventional feeds --| g 11. | t Developing new modules -- | g A. | t XML you need for RSS. **520** 1

|a "This comprehensive volume introduces content syndication's purpose, limitations, and traditions, and answers the question of "why would you consider 'giving your content away' like this?" The book delves into the architecture of content syndication with an overview of the entire system, from content author to end user. You'll follow the flow of data: content, referral data, and publish-and-subscribe calls, with a detailed look at the protocols and standards possible at each step. You'll understand the specifications and learn how to use them to their limits."--BOOK JACKET.

650 _0 | **a** Internet programming.

650 0 **|a** Web site development.

945 __ |a PromptCat |b Approval |c PITT

946 __ |a hill |**b** BookA |**c** 31735051815433

947 __ |a 33.56 **|b** 10267619

994 __ |a 92 |b PIT

This item

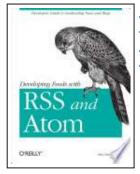
Record View

Staff View

Actions

- Print
- Export
- E-mail
- Add to My List

Google Books:



Limited **Preview** "About This Book"

Request This Item

Search My Searches My List My Account Help