Putting the Microsoft Open Specification in Perspective: A Review of Patent Promises & Covenants

Steve Mutkoski

Regional Director of Innovation & Interoperability

Microsoft Operations PTE LTD, Singapore

Suggested Approach

- ISO/IEC Requirements
- Implementer Requirements
- Observer-Policymaker-Academic-Hobbyist-User Requirements
- Review of the landscape
  - Sun, IBM and Adobe have all made similar pledges
  - Review similarities/differences
  - Reconsider criticisms in view of common approaches across these pledges

ISO/IEC Requirements

- Traditional method
  - Commitment to license on Reasonable and Non-Discriminatory (RAND) terms
- Growing trend
  - For technologies where companies desire quick and broad adoption
  - Need a simple, clear way to reassure a broad audience of developers and customers that the specification(s) can be used for free, easily, now and forever
- "IP Issues" and DIS-29500

IPR issues at the BRM

- Frequently Asked Questions regarding DIS-29500 Ballot Resolution Meeting
  - Will IPR issues be discussed at the BRM?
  - No. IPR issues in this process are the exclusive preserve of the ITTF. IPR decisions have previously been delegated by all the ISO and IEC members (NBs) to the CEOs of IEC and ISO, and they in turn have examined them and found no outstanding problems. NBs seeking reassurance in such matters must pursue them through other avenues than the BRM.
  - http://www.jtc1sc34.org/repository/0932.htm#q4-1

Implementer Requirements

- Dozens of developers have implemented Open XML
  - For a current list see http://www.openxmlcommunity.com/applications.aspx
- Implementations on a range of platforms
  - Linux
  - Mac OS X
  - Windows
  - Embedded
- By vendors who are
  - large, small and in between
  - Commercial and Open Source business models
- There are clearly many vendors out there who are satisfied with the Open Specification Promise and are implementing Open XML because they see customer demand

Linux Implementations

- Gnumeric
  http://www.gnome.org/projects/gnumeric/
- Linspire 6.0 Shipping Open XML Translator
  http://www.linspire.com/lindows_news_press_releases_archives.php?id=221
- OpenOffice – Novell Edition
  http://www.novell.com/prblogs/?p=299

Mac OS X Implementations

- DataViz MacLinkPlus Deluxe 16 http://www.dataviz.com/news/press/pressreleases/Detail.html?id=170
- Microsoft Office File Format Converter for Mac 0.1.1 (Beta) http://www.microsoft.com/mac/downloads.aspx?pid=download&location=/mac/download/office2004/converterbeta.xml
- Neo Office 2.1 http://trinity.neooffice.org/modules.php?name=News&file=article&sid=117
- Word Counter 2.4 http://www.macupdate.com/info.php/id/11111

Other Implementations

- Apple iPhone
  http://manuals.info.apple.com/en/iPhone_User_Guide.pdf [Page 48]
- Dataviz Documents to Go – Palm OS
  http://www.dataviz.com/news/press/pressreleases/Detail.html?id=169&product
- OpenXML4J - Open XML Framework for Java
  http://www.openxml4j.org/
- PHPExcel - Web Development (PHP)
  http://www.codeplex.com/PHPExcel/
- ThinkFree Write
  http://product.thinkfree.com/content/view/757/26/

Windows Implementations

- Altova XMLSpy
  http://www.altova.com/OOXML_060407.html
- Altsoft XML2PDF Server 2007
  http://alt-soft.com/News.aspx
- Corel WordPerfect Office
  http://www.corel.com/servlet/Satellite/us/en/Product/1191009902786
- Datawatch Monarch V.9.0
  http://www.datawatch.com/datawatch/news.asp?display=detail&id=128
- Madcap Flare
  http://www.madcapsoftware.com/products/flare/home.aspx
- Microsoft Office 2000, Office XP and Office 2003
  http://support.microsoft.com/kb/924074
- Microsoft Office 2007
  http://office.microsoft.com/en-us/products/HA102058151033.aspx
- MindJet MindManager
  http://mindjetlabs.com/cs/blogs/synergist/archive/2007/03/06/MindManager-Extensibility-and-Open-XML-File-Formats.aspx
- Open XML Writer – Open Source
  http://www.openxml.biz/OpenXMLWriter.html
- Xpertdoc Studio 2007 Reporting Solution
  http://xpertdoc.com/en/Products/XpertdocStudio/2007/Default.aspx
- Document Maker
  http://www.codeproject.com/office/DocumentMaker.asp
- Nuance OmniPage 16
  http://www.nuance.com/news/pressreleases/2007/20070731_op16.asp

About the Implementers

- The **Gnumeric** spreadsheet is part of the GNOME desktop environment: a project to create a free, user friendly desktop environment.

- **NeoOffice** is a fork of the free/open source OpenOffice.org office suite that is ported to Mac OS X. It implements nearly all of the features of the corresponding OpenOffice.org version, including a word processor, spreadsheet, presentation program, and graphics program. It is developed by Planamesa Software, and uses Java technology to integrate OpenOffice.org — originally developed for Solaris and Linux — with the Aqua interface of Mac OS X.

- **DataViz** is an industry leader in developing and marketing Office compatibility and productivity solutions across a variety of platforms including Palm OS, Symbian OS, BlackBerry, Java, Windows Mobile, Windows and Macintosh. Founded in 1984, DataViz began its business developing file conversion software and has since expanded its expertise to providing solutions that meet the increasing demands of the handheld and mobile markets.

- **ThinkFree** is the leader in next-generation office productivity solutions for platform independent, anytime, anywhere-computing. ThinkFree usability extends beyond PCs and is perfect for Internet-connected devices, including thin client and mobile computing platforms. The award-winning ThinkFree Office is a Microsoft® Office compatible application suite comprised of word processing, spreadsheet, and presentation graphics software-all usable online and off.   ThinkFree Office can automatically install and upgrade over the Web with features such as Internet-based file sharing and storage, as well as end-to-end security. Built for cross-platform functionality, ThinkFree Office is compatible with Windows, Macintosh, Unix and Linux systems.

- **Haansoft** (announced support) is one of the world's few companies possessing word processor software for the native language of the country. Hangul word processor software by Haansoft became Korea's official software in 2004 after becoming the first commercial software to surpass the 10 million mark in accumulated sales volume (copies).

Patent Covenants: Industry Practice

- IBM Interoperability Specification Pledge

  (see http://www-03.ibm.com/linux/opensource/isplist.shtml)

- Microsoft Open Specification Promise

  (see http://www.microsoft.com/interop/osp/default.mspx)

- Sun OpenDocument Patent Statement

  (see http://www.oasis-open.org/committees/office/ipr.php)

- Adobe Patent Clarification Notice

  (see http://partners.adobe.com/public/developer/support/topic_legal_notices.html)

Grant Language

IBM: "irrevocably covenants to you that it will not assert any Necessary Claims against you for your making, using, importing, selling, or offering for sale"

Microsoft: "irrevocably promises not to assert any Microsoft Necessary Claims against you for making, using, selling, offering for sale, importing or distributing any implementation"

Sun: "irrevocably covenants that . . . it will not seek to enforce any of its enforceable U.S. or foreign patents against any implementation of the Open Document Format for Office Applications"

Adobe: "the following patents are licensed on a royalty-free, nonexclusive basis for the term of each patent and for the sole purpose of developing software that produces, consumes, and interprets PDF files"

Versions

IBM: "Covered Specifications listed below" [listed specifications include version numbers]

Microsoft: "This promise applies to the identified version of the following specifications. New versions of previously covered specifications will be separately considered for addition to the list."

Sun: "v1.0 Specification, or of any subsequent version thereof ("OpenDocument Implementation") in which development Sun participates to the point of incurring an obligation, as defined by the rules of OASIS, to grant (or commit to grant) patent licenses or make equivalent non-assertion covenants."

Adobe: [Silence + listed patents approach]

Transferability

IBM: "This covenant is available to everyone directly from IBM, and does not flow from you to your suppliers, business partners, distributors, customers or others."

Microsoft: [silent]

Sun: [silent]

Adobe: [silent]

Conformity Requirement

IBM: "'Covered Implementations' are those specific portions of a product (hardware, software, services or combinations thereof) that implement and comply with a Covered Specification and are included in a fully compliant implementation of that Covered Specification."

Microsoft: "any implementation to the extent it conforms to a Covered Specification"

Sun: "any implementation of the Open Document Format for Office Applications (OpenDocument) v1.0 Specification, or of any subsequent version thereof"

Adobe: "for the sole purpose of developing software that produces, consumes, and interprets PDF files that are compliant with the Specification"

Scope of Claims Covered

IBM: "' Necessary Claims' are those patent claims that can not be avoided by any commercially reasonable, compliant implementation of the Required Portions of a Covered Specification. "Required Portions" are those portions of a specification that must be implemented to comply with such specification. If the specification prescribes discretionary extensions, Required Portions include those portions of the discretionary extensions that must be implemented to comply with such discretionary extensions."

Microsoft: "'Microsoft Necessary Claims' are those claims of Microsoft-owned or Microsoft-controlled patents that are necessary to implement only the required portions of the Covered Specification that are described in detail and not merely referenced in such Specification."

Sun: "obligation, as defined by the rules of OASIS, to grant (or commit to grant) patent licenses or make equivalent non-assertion covenants"

OASIS rules: "1. Essential Claims - those claims in any patent or patent application in any jurisdiction in the world that would necessarily be infringed by an implementation of those portions of a particular OASIS Committee Specification or OASIS Standard created within the scope of the TC charter in effect at the time such specification was developed. A claim is necessarily infringed hereunder only when it is not possible to avoid infringing it because there is no non-infringing alternative for implementing the Normative Portions of that particular OASIS Committee Specification or OASIS Standard. Existence of a non-infringing alternative shall be judged based on the state of the art at the time the OASIS Specification is approved."

Adobe: [Listed patents approach]

Exclusions

IBM: [Patent promise only extends to] "Required Portions of a Covered Specification. 'Required Portions' are those portions of a specification that must be implemented to comply with such specification."

Microsoft: [Patent promise extends to] "only the required portions of the Covered Specification that are described in detail and not merely referenced in such Specification."

Sun: [none]

Adobe: "In addition, the following patent is licensed on a royalty-free, nonexclusive basis for its term and for the sole purpose of developing software that produces PDF files that are compliant with the Specification (specifically excluding, however, software that consumes and/or interprets PDF files)"

Defensive Termination

IBM: "this covenant will become void, and IBM reserves the right to assert its Necessary Claims against you, if you (or anyone acting in concert with you) assert any Necessary Claims against any Covered Implementations of IBM or of any third party"

Microsoft: "If you file, maintain or voluntarily participate in a patent infringement lawsuit against a Microsoft implementation of such Covered Specification, then this personal promise does not apply with respect to any Covered Implementation of the same Covered Specification made or used by you."

Sun: "Sun's covenant shall not apply and Sun makes no assurance, covenant or commitment not to assert or enforce any or all of its patent rights against any individual, corporation or other entity that asserts, threatens or seeks at any time to enforce its own or another party's U.S. or foreign patents or patent rights against any OpenDocument Implementation."

Adobe: [none]

Reservation of Rights Clause

IBM: [none]

Microsoft: "No other rights except those expressly stated in this promise shall be deemed granted, waived or received by implication, exhaustion, estoppel, or otherwise."

Sun: "No other rights except those expressly stated in this Patent Statement shall be deemed granted, waived, or received by implication, or estoppel, or otherwise."

Adobe: [none]

Critique of the OSP

- Reconsider issues raised against OSP
  - Vagueness
  - Enforceability
  - Complexity
  - Transferability
  - Narrow- externally referenced technologies

Appendix

IBM Interoperability Specification Pledge

IBM wants to encourage broad adoption of the Covered Specifications listed below. Therefore, IBM irrevocably covenants to you that it will not assert any Necessary Claims1 against you for your making, using, importing, selling, or offering for sale Covered Implementations2. However, this covenant will become void, and IBM reserves the right to assert its Necessary Claims against you, if you (or anyone acting in concert with you) assert any Necessary Claims against any Covered Implementations of IBM or of any third party. This covenant is available to everyone directly from IBM, and does not flow from you to your suppliers, business partners, distributors, customers or others. So, if your supplier, business partner, distributor, customer or other party independently takes an action that voids the covenant as to itself, IBM reserves the right to assert its Necessary Claims against that party, even though this covenant will remain in effect for you.

By making this irrevocable patent covenant with regard to the Specifications listed below, IBM does not represent that it holds any or all Necessary Claims regarding the Open Specifications you choose to implement.

[listed specifications- omitted]

Definitions:

1"Necessary Claims" are those patent claims that can not be avoided by any commercially reasonable, compliant implementation of the Required Portions of a Covered Specification. "Required Portions" are those portions of a specification that must be implemented to comply with such specification. If the specification prescribes discretionary extensions, Required Portions include those portions of the discretionary extensions that must be implemented to comply with such discretionary extensions.

2"Covered Implementations" are those specific portions of a product (hardware, software, services or combinations thereof) that implement and comply with a Covered Specification and are included in a fully compliant implementation of that Covered Specification. Reference to IBM (or you) includes entities controlled by, controlling, and under common control with IBM (or you), based on majority control.

Microsoft Open Specification Promise

Microsoft irrevocably promises not to assert any Microsoft Necessary Claims against you for making, using, selling, offering for sale, importing or distributing any implementation to the extent it conforms to a Covered Specification ("Covered Implementation"), subject to the following. This is a personal promise directly from Microsoft to you, and you acknowledge as a condition of benefiting from it that no Microsoft rights are received from suppliers, distributors, or otherwise in connection with this promise. If you file, maintain or voluntarily participate in a patent infringement lawsuit against a Microsoft implementation of such Covered Specification, then this personal promise does not apply with respect to any Covered Implementation of the same Covered Specification made or used by you. To clarify, "Microsoft Necessary Claims" are those claims of Microsoft-owned or Microsoft-controlled patents that are necessary to implement only the required portions of the Covered Specification that are described in detail and not merely referenced in such Specification. "Covered Specifications" are listed below.

This promise is not an assurance either (i) that any of Microsoft's issued patent claims covers a Covered Implementation or are enforceable or (ii) that a Covered Implementation would not infringe patents or other intellectual property rights of any third party. No other rights except those expressly stated in this promise shall be deemed granted, waived or received by implication, exhaustion, estoppel, or otherwise.

Covered Specifications (the promise applies individually to each of these specifications)

This promise applies to the identified version of the following specifications. New versions of previously covered specifications will be separately considered for addition to the list. In connection with the specifications listed below, this Promise also applies to the required elements of optional portions of such specifications.

Sun OpenDocument Patent Statement

Sun irrevocably covenants that, subject solely to the reciprocity requirement described below, it will not seek to enforce any of its enforceable U.S. or foreign patents against any implementation of the Open Document Format for Office Applications (OpenDocument) v1.0 Specification, or of any subsequent version thereof ("OpenDocument Implementation") in which development Sun participates to the point of incurring an obligation, as defined by the rules of OASIS, to grant (or commit to grant) patent licenses or make equivalent non-assertion covenants. Notwithstanding the commitment above, Sun's covenant shall not apply and Sun makes no assurance, covenant or commitment not to assert or enforce any or all of its patent rights against any individual, corporation or other entity that asserts, threatens or seeks at any time to enforce its own or another party's U.S. or foreign patents or patent rights against any OpenDocument Implementation.

This statement is not an assurance either (i) that any of Sun's issued patents cover an OpenDocument Implementation or are enforceable, or (ii) that an OpenDocument Implementation would not infringe patents or other intellectual property rights of any third party.

No other rights except those expressly stated in this Patent Statement shall be deemed granted, waived, or received by implication, or estoppel, or otherwise.

Similarly, nothing in this statement is intended to relieve Sun of its obligations, if any, under the applicable rules of OASIS.

Adobe Patent Clarification Notice: Reading and writing PDF files

Adobe has a number of patents covering technology that is disclosed in the Portable Document Format (PDF) Specification, version 1.3 and later, as documented in PDF Reference and associated Technical Notes (the "Specification"). Adobe desires to promote the use of PDF for information interchange among diverse products and applications. Accordingly, the following patents are licensed on a royalty-free, nonexclusive basis for the term of each patent and for the sole purpose of developing software that produces, consumes, and interprets PDF files that are compliant with the Specification:

U.S. Patent Numbers:

- 5,634,064
- 5,737,599
- 5,781,785
- 5,819,301
- 6,028,583
- 6,289,364
- 6,421,460

In addition, the following patent is licensed on a royalty-free, nonexclusive basis for its term and for the sole purpose of developing software that produces PDF files that are compliant with the Specification (specifically excluding, however, software that consumes and/or interprets PDF files):

U.S. Patent Number:

Andy Updegrove on OSP

- http://www.consortiuminfo.org/standardsblog/article.php?story=20060912140103877
- Context of industry direction:
  - "In effect, it [a CNS] is similar to the more traditional promise given by companies when they engage in the development of a standard, but with several important differences:
    - 1. Instead of reserving the right to require each implementer to agree to the terms of a license agreement of the patent owner's choosing, the promise is 'self-executing' . . .
    - 2. Unlike the usual promise to license on RAND ("reasonable and non-discriminatory") terms, where the terms themselves are almost never made public in advance, and often never at all, all of the terms in a non-assertion covenant are out in the open, and apply equally to all."
  - "Promises and covenants such as the one that Microsoft has announced today have historically been unusual, but have lately been made more frequently…."
- Versions:
  - "As with traditional standard setting commitments, patent owners are wary about making open-ended promises, since in an extreme case a competitor could seek to extend a standard to describe part of, or all of a product of a patent owner, going far beyond what had been anticipated by the owner at the time that it made its commitment. Although there are differences from organization to organization, typically when a new version of a standard is approved, a member remains bound by so much of the standard as does not change, but is not bound by any new material that is added to it unless it is then a member, and agrees to do so."
- Conformity
  - "From a standards point of view, that serves a purpose, as it furthers the spread of interoperable implementations, which is what standards are all about. That works well from that perspective, but may leave some open source advocates less happy. Still, nearly all standards obligations are so limited, so to the extent that this limitation is regarded as unfortunate, the same objection could be made against nearly other vendor as well."