



Developers Beware

OOXML – IPR: Minding the Gaps and Why They Matter

Microsoft has a patent promise, the Open Specification Promise (OSP), and a Covenant Not to Sue relating to OOXML. If you want to implement OOXML with confidence that you are not infringing on any intellectual property rights (IPR), these coverages are not adequate. They have gaps.

Even after the February 21, 2008 media announcement proclaiming "Strategic Changes in Technology and Business Practices to Expand Interoperability"¹, the IPR gaps remain for OOXML. As Microsoft has done of necessity, they are committing to drop copyright and trade secret coverage of certain data formats.² However, the patent concerns discussed in this paper remain. The announcement indicates that for data formats "Patents, if any apply, will be made available for licensing on reasonable and non-discriminatory terms."³

The OSP applies to (bold italic added): "*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.*" And it "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..."⁴

This means that the OSP, and/or the Covenant⁵

- do NOT cover important portions of the specification that "are not described in detail"
- limit patent coverage to the syntax in the specification, excluding application behavior
- do NOT include patents held by its subsidiaries.

Beware of the "described not referenced" gaps. Due to the "fast track" pace and its 6000 plus page length, only a fraction of the OOXML specification has been examined for inadequate description and for "merely referenced" features (e.g., cites to standards and proprietary documents) for which OSP patent coverage would not apply. As to the reviewed portion of the specification, numerous National Bodies have raised comments about specific inadequate descriptions. The lengthy Ecma response only compounds the examination task and raises new coverage questions.

1 <http://www.microsoft.com/presspass/press/2008/feb08/02-21ExpandInteroperabilityPR.mspx>

2 <http://www.microsoft.com/interop/principles/default.mspx>, "Such Open Formats will be documented in their entirety with the exception of portions understood by the industry to be "opaque by design," such as objects embedded by other applications. Here again, access to specifications regarding Open Formats that are not standardized will be available on Microsoft's website".

3 Interoperability Principles, <http://www.microsoft.com/interop/principles/default.mspx>, at Principle III: Data Portability - 2. Open Formats.

4 <http://www.microsoft.com/interop/osp/default.mspx>

5 <http://office.microsoft.com/en-us/products/HA102134631033.aspx>

Specifically, Ecma's response adds some "brief [feature] descriptions." However, the original specification said the features could not "be faithfully placed into narrative for this OOXML Standard." Therefore, there may be a question whether behaviors, which could not be faithfully narrated then, are "described in detail" now. These descriptions may exclude patents Microsoft has that you may need.

For example, an early draft of OOXML said that print settings must be stored in a DEVMODE structure (a proprietary Windows data structure not described in detail). Ecma subsequently changed the text to say that print settings are stored in an implementation-defined format, which may be DEVMODE. Not "described in detail" and not indicated as "required," the OSP does not apply. If you must store in DEVMODE and there is a Microsoft patent there, mind the gap.

A second example of the "detailed description gap" comes from a National Body comment: "Full utilization of the specification requires implementation of numerous other Microsoft proprietary technologies, such as OLE, macros/scripts, encryption, and DRM, none of which are fully described by Microsoft and Microsoft has not stated a position regarding the availability of the necessary information. Complying with these requirements and others like them would be practically impossible without further information from Microsoft."⁶ The ECMA response says that these technologies are not required or necessary. If you do not agree, mind the gap.

Beware of the Application Gaps. The Microsoft promises involve "conformance to the specification" and "conformance" would seem to be limited to the syntax described in the OOXML specification.⁷ Accordingly, it may not cover application behavior even if the behavior is required for interoperability and document fidelity. For example, a patent claim to the string (syntax) used for a linebreak XML attribute (as in WORD97) could qualify as "necessary", but a claim needed to enable development and implementation of a linebreak feature (semantics) is apparently excluded.

This has prompted Google to say that "syntax...is typically not patentable...so Microsoft could try to invoke possible patents covering preferred mechanisms for reading, parsing, displaying, etc. OOXML documents, all of which would not be licensed under the Microsoft promise because they are outside the 'conformance' definition."⁸

Another example, the ECMA response notes "Other features, such as paragraph justification are also present in the standard, but the algorithms for creating the "ideal" paragraph justification are not ...because applications can innovate to create more optimum justification algorithms."⁹ If there is a

6 Ecma Response Document for Fast Track Ballot of ISO/IEC DIS 29500 (ECMA-376) (Ecma Response) at <http://www.computerworld.com/pdfs/Ecma.pdf>

7 The OOXML Specification Ecma-376, both in Part 1, Section 2 "Conformance" and in Part 2, (Annex H) clarifies that "conformance" is limited to syntax and not semantics, viz., Part 1, Section 2.5, "Application Conformance is purely syntactic."

8 Preliminary Google reply to DIS 29500 : the consideration of ECMA-376 OOXML for ISO standardization

9 Ecma Response at Page 15.

Microsoft patent on the best and/or perhaps only existing way of justifying paragraphs (or other omitted methods) needed in implementation, that patented technology is not subject to the promise because (i) it is not described, (ii) the technology is not considered required, and (iii) the protection only applies to syntax. Mind the gap.

Beware of whose patents are promised. While industry pledges on standards typically include subsidiaries' patents¹⁰, the Microsoft promises do not. For example, when Microsoft has a major interest in an entity that aggressively licenses patents, these patents are not included. Mind the gap.

Are these patent promise gaps something to be concerned with?

Yes, the gaps are not just academic. If you want (i) interoperability with Microsoft products and (ii) to compete in the marketplace without IP licensing headaches, these gaps matter. First, to interoperate with Microsoft Office, the specific details to work with Office may not be “required” and therefore not covered under Microsoft’s OSP. For example, frequently when there is a specific reference used in Microsoft patented-protected applications, there is also reference to some “alternatives.” This destroys the notion of backward compatibility -- by listing alternatives, the Microsoft technology is not required and hence information and promise protection can be excluded. Earlier, the specification gave, without detail, the “Microsoft way” saying it was essential, now they provide alternatives saying “is not essential” and therefore it is not covered. In short, OOXML and the OSP may give implementers the ability to implement portions of the standard, but a form of it which MS Office neither reads nor writes. If one of your goals is compatibility with MS Office and the economic network effects that such compatibility would promise, that goal may go unsatisfied. Mind the gap.

Second, Microsoft is not bashful about using its patents to compete. For example, Microsoft has used concerns about patents to:

- Slow the adoption of Linux.¹¹
- Increase the risk to standard implementers by favoring patent holder rights over the interests and concerns of implementers.¹² If your implementation does not fit the precise Microsoft promises’ metes and bounds, mind the gap.

To the extent that patented technology is outside the Microsoft promises, you as a developer, implementor, or purchaser might wonder what patent challenges might lie ahead in the OOXML space. And how they might affect goals of customer choice, implementability, interoperability, and

10 Two examples are a) the IBM Pledge, <http://www-03.ibm.com/linux/opensource/isplist.shtml>, Footnote 2: "Reference to IBM (or you) includes entities controlled by, controlling, and under common control with IBM (or you), based on majority control." and b) the OASIS Intellectual Property Rights (IPR) Policy, <http://www.oasis-open.org/who/intellectualproperty.php>, where it is clear that members commit to license patents of "affiliates" in numerous sections of the policy.

11 <http://blog.wired.com/monkeybites/2007/10/steve-ballmer-s.html> by Scott Gilbertson October 10, 2007.

12 For example, while other companies (also patent holders) support more robust disclosure of patent license terms during standards to avoid potential patent holdup of implementers after a standard is adopted, Microsoft questions broad ex ante measures and patent holdup as a problem. http://portal.etsi.org/docbox/Workshop/2007_IPR_Symposium/015.1%20EN%20-%20MICROSOFT_MARASCO.pdf

future access to documents.

Microsoft has made patent promises, but don't rely on them for all the rights you may need under Microsoft patents.¹³ And for specification not fully reviewed, whether a patent correlates to the description and is subject to the promise will remain a mystery. At the end of the day, *the gaps matter*.

13 For example, the recent Baker & McKenzie paper, Standardisation and Licensing of Microsoft's Office Open XML File Formats, http://www.bakernet.com/NR/rdonlyres/EEE2F422-F747-42CA-9DAA-E72F751A2FFA/0/london_it_openxmlstandardisation_publication_jan08.pdf, page 4, refers to an earlier license offer from Microsoft which indicates that if a party does not consider the Promises adequate, Microsoft will grant a Patent License. As noted in the opinion, the patent license included a number of terms, such as attributing Microsoft in subsequent copies and derivative works and limiting the licensing to "only reading and writing files...".