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MICROSOFT, ADOBE AND WHAT'S WRONG WITH "RAND"

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For a week now, the IT world has been scratching its collective head over the breakdown of PDF licensing negotiations between Microsoft and Adobe. At issue is why Adobe has allowed OpenOffice.org and Apple to bundle native support for saving documents in PDF format without any economic hooks, but apparently is requiring Microsoft to charge its customers more for Vista if this new release includes the same capabilities - even though the basic functions of PDF are included in an ISO-adopted standard that should be available to all on the same terms.

There are, I think, two logical explanations. One is relatively straightforward, while the other represents a convoluted and little-discussed weakness in the traditional way of creating standards. In this entry, I'll describe both possible explanations, but I'm betting that the convoluted alternative will prove to be the explanation for what is happening here.

Let's knock off the easy explanation first, which relates to exactly what it is that Microsoft would like to license from Adobe. At one end of the spectrum, Microsoft may only be interested in licensing those Adobe patent claims that would be infringed if Microsoft were to write software to implement the PDF specifications that have been adopted as standards by ISO/IEC. Next up the value chain would be wanting to license the actual code that Adobe itself uses in Acrobat to save documents in the PDF format (not too likely a scenario, given that Microsoft has written a few lines of code itself over the years). And finally there would be a Microsoft request to license the rights to include additional features in Vista that are included in Acrobat, but which are not described in the ISO/IEC standard. Such "proprietary extensions," as I discussed in my last blog entry, can be quite desirable - as Microsoft is well aware.

In the first case, Adobe would have an obligation to license the patent claims to Microsoft on RAND terms (on which more below). But in the latter two cases, Adobe would be fully justified in imposing whatever unique requirements it wished on the extra code and/or patents, as the case may be, since it is not bound by the specific undertakings it entered into with AIIM (the actual standards body that described and adopted the PDF elements that it then submitted to ISO/IEC) with respect to actual code or any additional functionalities.

So the first possibility is simply that Microsoft wants more than Adobe is required to give it under its standards-related undertakings.

This possibility underlines the difference between a *de facto* standard and a *de jure* standard. Broadly stated, a *de facto* standard describes something that the market has overwhelmingly decided that it wants to use in order to achieve the same result as an official standard (such as the interoperability that exists among users of Windows and applications that run on Windows). Such a *de facto* standard can deliver a degree of interoperability that is far superior to that achieved by *de jure* standards, but at a cost: with a *de facto* standard, everything is controlled by a single vendor (or group of vendors).

In the case of PDF, there is, in effect, a *de jure* standard (ISO PDF) nested within a *de facto* standard, the latter being the Adobe Acrobat product with its added features. Another example of the same situation would be Microsoft Office, in comparison to Open XML if it is approved by Ecma and ISO/IEC. Anyone would be free to implement Open XML (just as anyone can implement ISO PDF, whether Adobe likes it or not), but they would not be free to simply reverse engineer and sell Office (or Acrobat) in its entirety.

Now let's look at the second possibility, which is that Microsoft and Adobe are arguing about exactly what terms Adobe is obligated to offer to Microsoft, in these specific circumstances, under a typical "RAND" licensing obligation.

RAND stands for "**R**easonable **A**nd **N**on-**D**iscriminatory" (in Europe, an "F," for "Fair," is often added, without really changing the meaning). When a participant in a standards process agrees to RAND licensing, that obligation relates to any patent claims it owns that would be infringed by an implementation of the standard in question. The obligation itself has three principle elements: to provide a license to these patent claims to everyone that requests a license, to provide that license on reasonable terms, and to ensure that the terms one implementer are the same as those that are offered to every other implementer under substantially the same circumstances.

Sort of.

The reason for the "sort of" is that while "reasonable and non-discriminatory" sounds all very fine and clear, exactly what that phrase means is in fact never strictly spelled out, and would be difficult to impossible to define with precision in any event. What, for example, is "reasonable?" Would a reasonable royalty under a standard be lower, because of the volume that will result from wide adoption of the standard, allowing a handsome profit even if the per-product rate was low, or higher, because of the value that standardization provides to the licensee on top of the normal value of a patent license? And would it be reasonable for a patent owner to require an implementer to provide a license back to the licensor to any of the implementer's own patent claims that would be infringed by an implementation of the standard? Historically, the answer to this last question has been "yes" - but that was before open source licensing began to proliferate. If the standard was relevant to open source software, then the answer from the open source community would be a resounding "no!"

The meaning of "non-discriminatory" is even more difficult to nail down, for the same reason that a "most favored nation" clause in a legal contract is hard to define (and therefore enforce). Under a most favored nations clause, a vendor (for example) agrees that if it ever gives another customer a better deal under "substantially similar circumstances," the contract will automatically readjust to give the same deal to the "most favored" customer.

But what does that really mean? For example, could someone under a RAND obligation (or a most favored nation clause) charge a lower royalty per unit from someone that orders 100,000 units than one that orders 1,000 (pretty clearly yes, in the most favored nation clause example)? How about 90,000 units? What if they both order 100,000 units, but one is an OEM and the other isn't? Or if they are both the same, but one agrees to include mention of the vendor's product in a national marketing campaign? And how about if there is an underlying patent cross license between the vendor (or RAND patent owner) and one party, and not the other? Could the patent owner under the RAND obligation charge the person ordering only 1,000 units no royalty at all? In short, are any of these factual settings really "substantially similar?" Or are they sufficiently "dissimilar" to justify offering different terms in each case? And if so, is there any limit on how different they can be?

If in fact Microsoft is only interested in the ISO/IEC elements of the PDF product, then this is what I assume Adobe is relying on to justify its refusal to provide a free license. After all, in the real world of bundled functionalities there can be as many apples to oranges comparisons as apples to apples. Perhaps there's an existing agreement between Microsoft and Adobe that Microsoft wants to modify at the same time, and Adobe is tying that negotiation to the PDF negotiation, attempting to take it outside its RAND obligation. Or perhaps Adobe is saying that the Vista situation is different than the OpenOffice.org arrangement in some as-yet undisclosed way. Or perhaps Adobe is saying that asking Microsoft to

charge more is "reasonable" - after all, it doesn't appear that Adobe is asking that Microsoft pay anything, just that Microsoft make a bigger profit (what could be unreasonable about that?)

The reason that this type of ambiguity represents a weakness in the standards system is that there's no easy way to resolve a dispute if an implementer believes (or suspects) that it is being treated unreasonably or discriminatorily. Standard setting organizations don't have the budget or resources to act as arbitrators to settle disputes, and therefore refuse to do so. And the implementer never knows what kind of a deal another implementer got in any event, because the vendor has no obligation to disclose those terms or report back to the standards organization on whether or not it is meeting its RAND obligations.

This sort of dispute would easily explain two things: how Microsoft and Adobe could have negotiated for four months over something that should have been automatic, and how Adobe could have felt safe digging in even though it is under a RAND obligation.

Is this in fact what is going on? We may never find out, since it appears that Adobe is not in fact planning to file a complaint with the European Commission after all. Late yesterday, according to ConnectIT.news, Adobe made its first statement on this topic:

> "As a matter of policy we do not comment on discussions with customers, partners or competitors," stated Adobe officially in an email via its public relations company.
>
> "However, in response to allegations made by Microsoft to the press, Adobe has made no determination to take legal action against Microsoft. Further, with regard to any discussions we have had with Microsoft about Office and Vista, our sole motivation is to maintain a fair, competitive landscape in the software industry," Adobe added.

Interestingly, I haven't been able to confirm this Adobe statement anywhere else on the Web. But if this report is accurate, it fits the second alternative scenario perfectly.

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