

## **Patent drag and stacking IPR fees - Are the IPR policies of standards bodies failing or should we better address excessive technology inclusion?**

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Modern standards, especially in fields where interoperability is key, can often not be developed without covering patented inventions. This is not necessarily a bad thing: by including a patented technology, the standard may gain significantly in performance or cost-effectiveness. Increasingly often, however, standards cover very large amounts of essential patents, sometimes up to thousands. Essential IPR are, more than ever, seen as a strategic tool by manufacturers, technology development firms and others. Such large numbers of patents and patent holders may lead to (1) large transactions costs, (2) problems with cumulative license fees and (3) possible access problems. Also, it introduces distribution questions: are all parties properly awarded with regard to the value of their IPR? Does it have adverse effects on adoption, or introduce delays?

ETSI's IPR policy, which has been the basis for similar policies at so many SDO's, is currently under fire. From many different perspectives, parties have expressed their concern about its functioning. Some believe that the (F)RAND model is dead, while other stakeholders see other, serious shortcomings. Additionally, there have been alarming problems in ICT markets with submarine/ambushing patents and 'patent trolls'. These concerns made ETSI decide to establish an IPR Review ad hoc group, which was to advise the General Assembly ETSI. This IPR group had three (closed) workshops, and participation of members was massive. This group finished its work in November 2006. Despite the considerable concerns and the wide variety of suggestions for changes, the groups' final recommendation to the ETSI GA was to make only minor changes to the IPR policy. Is this because the imminent problems are not really there, or because disagreement and differences in stakes prevented the group to reach consensus on the desired changes? This is a paramount question, because if major problems are indeed observed with the ETSI IPR policy, than the policy of many SDOs might need to be revisited.

The solutions that are often suggested by stakeholders, and discussed by academics, often relate to fixes to the system by revising IPR policies. Others believe that problems might be relieved by introducing new coordination and transaction mechanisms, such as patent pools. In this position paper, I suggest we move away from looking at fixes and try to address the real source of the problem.

I here postulate that we might better address excessive technical inclusion. To do that, we should first ask ourselves the question *when* we actually want a standard to read on a patent (from different perspectives). And appropriate answer might be: when the patented technology offers a significant gain in performance or cost-effectiveness, which outweighs the costs of including that patent (license fees and other costs). Similar to US president Thomas Jefferson's statement that patents should draw "*a line between the*

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*things which are worth to the public the embarrassment of an exclusive patent, and those which are not.*”, standard bodies should draw a line between what’s really worth including and what is not.

For the UMTS standard, a recent working paper<sup>2</sup> reported that by early 2005, no less than 6,313 essential patents were notified, by more than 70 different owners. Among these, the study identified at least 1,227 unique patents (usually applied for in different legislations), while a few large manufacturers yet omitted to identify essential patents from their portfolios. While it is perfectly thinkable that for such a broad and complex standard, several dozen patents may contribute significantly to the performance or cost effectiveness, it is hard to believe that more than a thousand patents must be included to produce a valuable standard. Supporting evidence might be found in a recent citation analysis, presented in the same working paper. It shows that the large majority of claimed essential UMTS patents receive fewer cites than average patents do (corrected for age and industry). This is puzzling at the least: if patents are so valuable that they are selected to be included in the standard, one might at least expect that these patents are cited much more often. Other anecdotal evidence comes from reading the patent claims: it’s hard to excuse anyone from seeing many of trivial claims (e.g. a patent that in essence describes a information certain header being 7 bits long, not 6 or 8).

How could this have happened? And how can one explain that some other standards that are roughly equally complex, have so much fewer essential patents? My hypothesis here is that, for certain standards, a culture of implied agreements emerged in the Technical Committees (TCs): all participants implicitly allow others to move trivial patents into the standard, as long as they are allowed to put the own trivial patents into the standard as well. The results are that these standards are loaded with IPR; a patent drag. This is worsened by over-specification (sometimes the result of attempts to meet conflicting requirements by including extra technology). Also compromises between the stake holders may lead to unnecessary inclusion of several technologies: case studies of UMTS illustrate that when ETSI set on a compromise for the UMTS basic technology choice, incorporating technologies form two different proposals, trying to satisfy both Siemens and Alcatel on the one hand, and Nokia, Ericsson and a number of other firms on the other. It resulting in stacking IPRs.

How may we address this problem? One promising route is to cater for more competition between standards and within standards. It is not without reason that most imminent IPR problems are observed with standards that face little competition (at least in their home market): their almost guaranteed adoption allows the stakeholders to play a high game. Another solution may be found in the reform of the TC process, introducing more deliberate considerations for each patent to be introduced. Though these solutions will certainly not solve all problems, I believe they address the heart of the problem, not the symptoms.

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<sup>2</sup> Rudi Bekkers & Joel West (2006). *The Effect of Strategic Patenting on Cumulative Innovation in UMTS Standardization*. Paper presented at the DIME Workshop on Rules, norms and standards, March 4th, 2006.