New project on the creation of a concordance table between the technological classifications of patents and standards

In a workshop held in Berlin on July 29, 2014, a small group of experts and interested parties initiated joint work on a concordance table matching the technological classifications of patents (the CPC or IPC classifications) and standards (the ICS classification). Both classifications allow for a very precise and disaggregated description of the technological content of technical documents. Our group currently includes participants from DIN Software GmbH (which is part of DIN, the leading German standard setting organization), a number of academics interested in innovation and technological standardization, as well as IPLytics, a consulting firm specializing in the analysis of intellectual property related to technology standards. We also associated experts on telecommunications and standard setting from the European Patent Office (EPO) to our project. We are currently inviting other participants to join the group.

The aim of this project is to create a concordance table that is publicly available free of charge, and hopefully receives official backing from DIN, the EPO and other relevant standard setting organizations and patent offices. Such a concordance table would be useful for academic research, e.g. in order to study the interaction between standardization and innovation. There is also a demand for a concordance table from practitioners. The EPO has expressed interest in a concordance table to facilitate the search for prior art in standard documents. Standard setting organizations like DIN are interested in a concordance table to facilitate the search for patents that are potentially related to their standardization projects. More generally, companies using databases on standards in their process management frequently also use information on patents. There is thus also a broad scope for potential commercial applications of the proposed concordance table.

During the initial workshop held at DIN offices in Berlin on July 29, 2014 we agreed to explore automated approaches for matching CPC and ICS classes using several existing databases connecting standards to patents or standard documents to CPC classes. For instance, the CPC classification of declared standard-essential patents is useful in the field of information and communication technologies. Furthermore, in the past, a substantial number of German standard documents have been classified in the IPC classification by the German patent office. We propose to use the double classifications (IPC and ICS) of these documents in our project (IPC classes can be directly related to CPC classes). Furthermore, additional information can be obtained using information on patents citing standards as part of the non-patent literature citations.

Another interesting option for our project is keyword matching. Perinorm is a leading database of technology standards created and maintained by DIN Software and Beuth Verlag together with other European standard setting organizations. The 1.5 million standard documents included in the Perinorm database are connected to a database of 60,000 keywords describing the technological content of each standard. Several recent contributions in the literature make use of similar keyword databases describing patents, e.g. to match patents to industries of use. We will explore whether it is possible to connect the

Perinorm database with keywords for technology standards to existing databases with keywords for patents in order to match patents to standards.

We plan to present the first results of the work of our group at the Searle Center Research Roundtable on Patents and Innovation taking place in Chicago in April 2015. We hope to publish our results in the course of 2015. It is our ambition to create a tool that helps increasing transparency and is useful for a wide range of practitioners at the intersection of patents and standards.

Berlin, Chicago

September 17, 2014

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