

Fraunhofer in 5G: The contribution of research institutions to standard development

Topic for MSc. – Thesis:

ICT standards such as 5G, Wi-fi, and compression technologies such as HEVC are jointly developed by often large numbers of firms and organizations. Research institutions, universities as well as pure research organizations, often play important roles in such developments, as witnessed by Fraunhofer's development of the MP3 audio compression standard. They presumably differ from commercial firms in three respects. First, they might make more fundamental contributions due to a stronger focus on basic research. Second, due to limitations in size, budget, and personnel they might face higher hurdles in pushing their inventions into the official standard specification, due to a weaker negotiation position within the standard development organization. Third, again due to the above limitations they might find it harder to commercialize their standard-related inventions, i.e., to license the standard essential patents they own.

Thesis: In this thesis, the above conjectures shall be researched. Methods will comprise a literature and web search, interviews, and patent data analysis. Good skills in data handling and statistics are required, and the willingness to learn more.

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