

A Visit to Google Reveals the True Nature of their Intellectual Property Strategy

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In early February we visited Google headquarters in Mountain View, California, to speak with a senior manager in the company's intellectual property division. Although there was a drizzle, which was unseasonable for the area, Google headquarters was full of activity. We had already prepared a panoramic chart for all the unexamined patent applications that Google had submitted in the US. This panoramic chart is a means of visualizing all patents on one screen by representing similarities between documents as distances on a radar using Valuenex's TechRadar software. Based on the fact that densely populated regions have numerous similar patents and sparse regions have few or no patents, we are able to decode corporate R&D and patent strategies. We initially surmised that Google does not have a companywide portfolio. When we checked with the intellectual property manager, we were told that the company's patent distribution is varied because Google has many business divisions. Furthermore, while Google does not really consider using patents aggressively against other companies, it uses them to prepare for when they are used aggressively against Google. In other words, the company has an extremely passive intellectual property strategy.

Varied Application Structure

When we showed the intellectual property manager the panoramic chart (Figure 1) that expressed all 18,925 of Google's unexamined patent applications and patents that it later acquired the rights for in the US on a single radar diagram, his eyes lit up. He immediately requested that we send him a copy and asked if he could show it to the staff in his division. It appears that he saw something that we should not have seen as outsiders.

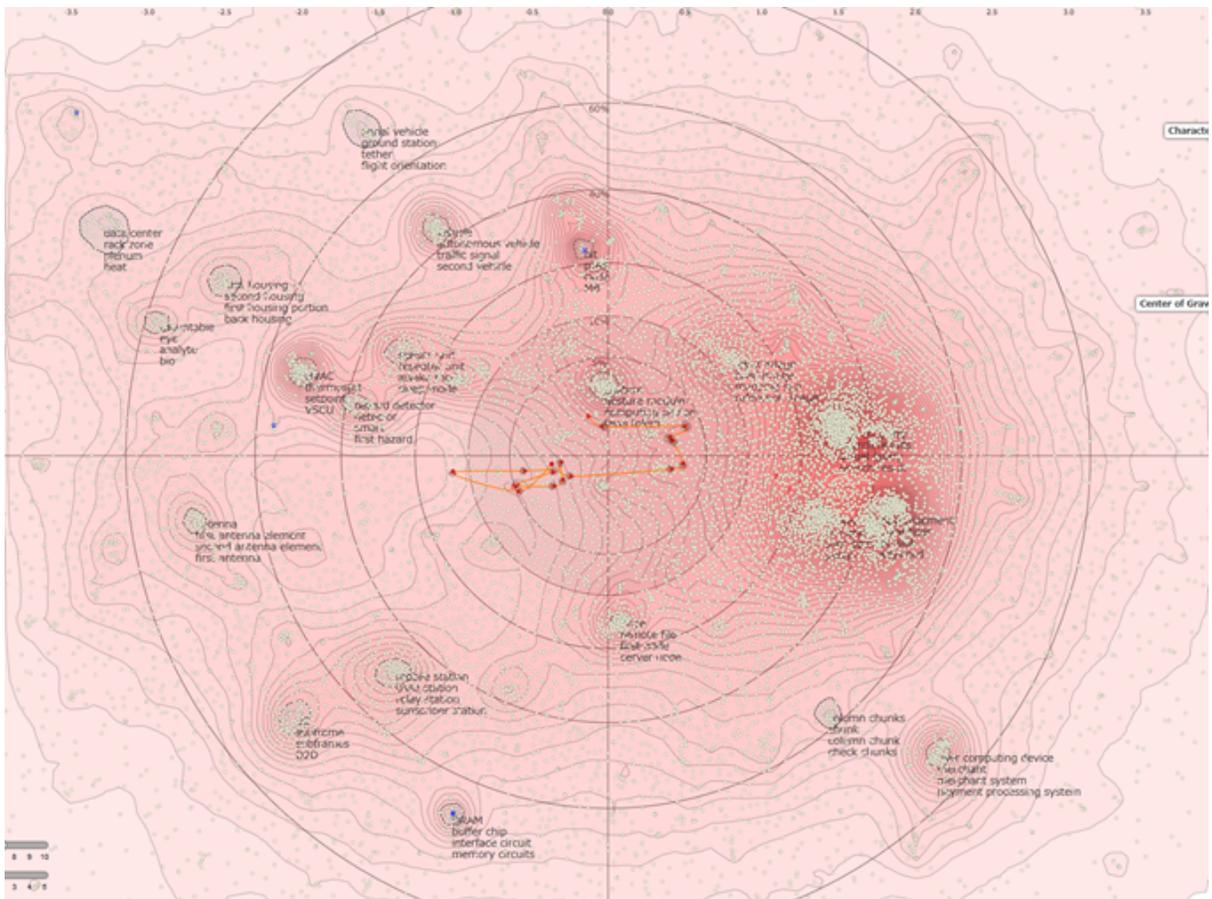


Figure 1 - Google's Structure for US Patent Applications

Google has always been an open company, and even cutting-edge technology that the company has researched and developed has been published in various papers. Their openness is also evident in the free and easy atmosphere of Google, which is just like that of a university. The intellectual property manager gave us a brief tour of the cafeteria, the quad, and the surrounding paths, but we never once saw a worker who seemed full of despair as we often do in Japan. This freedom is also reflected in Google's panoramic chart. In other words, Google's strength remains in its search engine and advertising business, and its other businesses are nothing but enticements used to bring people into its network. Street View and Google+ are surely included in this category. The autonomous car contributes nothing but a topic of conversation at present. Android would have no sales if not for the devices. When decoding Google's IP strategy, we see patent applications that are rarely meant to protect its businesses; rather, the company applies for patents as a defensive measure to avoid aggressive claims from other companies. This explains the lack of cohesiveness in Google's patent application structure.

The Seriousness of its Entry in the Mobility Market

Nevertheless, in terms of technologies related to mobility, including autonomous driving, we identified a rapid upswing in the number of Google's patent applications that are approaching the automobile region in the past three years. One piece of supporting evidence is the announcement that Honda R&D Co., Ltd. made on December 22, 2016. It announced that it was beginning to consider a joint research project with Waymo, Google's self-driving development company. If we show the 39,083 unexamined patent applications made in the US by Honda and Google in a panoramic chart (Figure 2), the central R&D for both companies remains separated, but the space between the technology regions that are at the core of both companies has been gradually shrinking over the years, making it clear that they are actually engaging in an R&D competition.

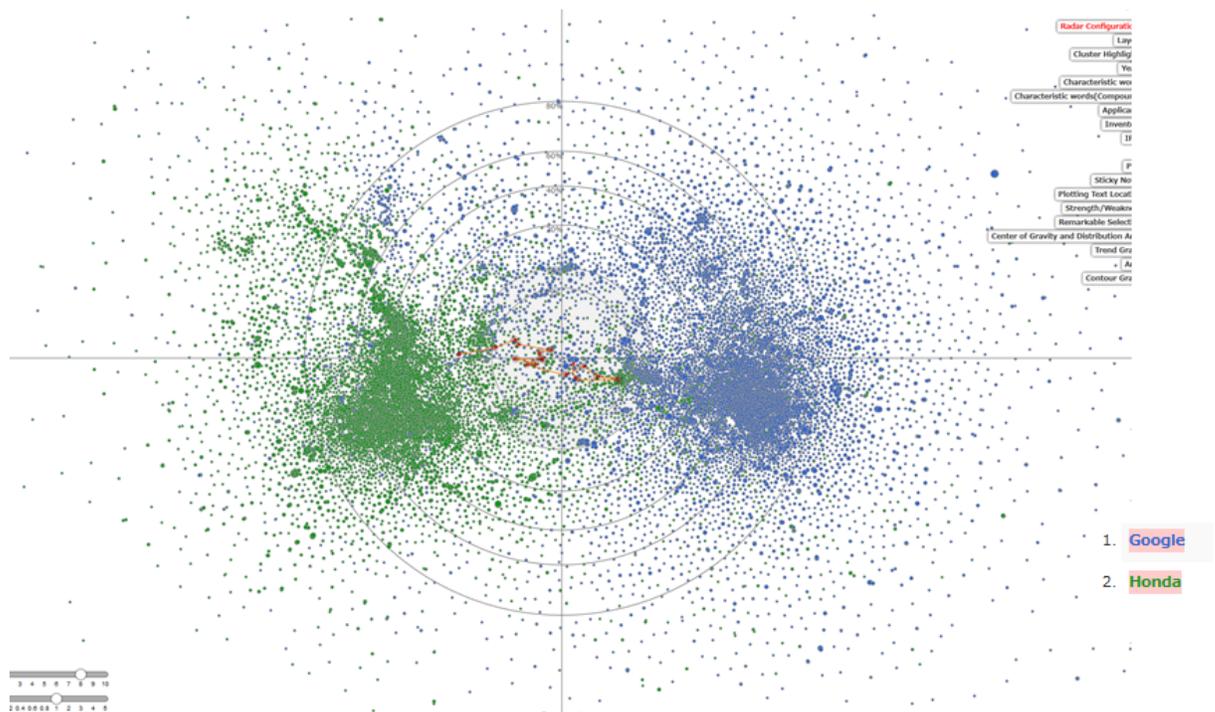


Figure 2 - Panoramic Chart showing Technological Similarities between Google and Honda Motor Co.

The main technologies that they are competing for are image-sensing-related technologies. From Google's perspective, these are key technologies for autonomous driving, while from Honda R&D's perspective as an automobile company, they are key for collision prevention safety devices. Furthermore, Google's patents are found within the automobile region, Honda's stronghold. Patent applications related to energy and motive power, including fuel cells and the like, are also increasing (Figure 3).

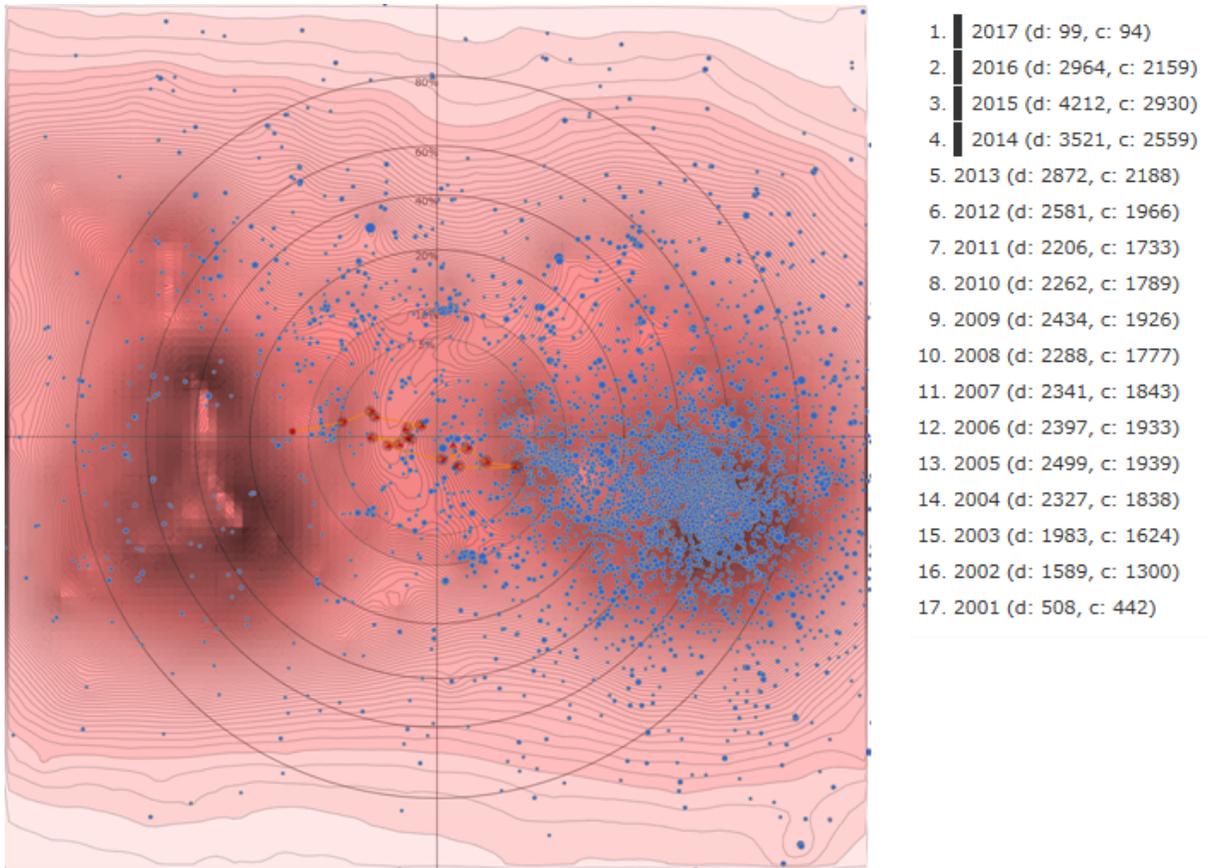


Figure 3 - Google's Expansion towards Honda Motor Co.'s Region (2014-2017)

This shows that Google is not just concerned with controlling autonomous cars using solely software technologies but it is actually reaching for core automobile technologies as well. We believe this may indicate a serious plan to transition from its search engine and advertising businesses. We asked the intellectual property manager if this is true, but he avoided giving a clear response, as expected. However, it appears that there is some degree of truth to our presumption. While there are rumors of a reorganization of the automotive industry, which has reigned as one of the key industries in Japan, Google's open R&D strategy could instead evoke images of the industry's past closed nature. We will continue to observe how this situation develops.

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