Transfer Restricted



Intellectual Property Analysis of the Alcatel-Lucent Acquisition

April 16, 2015

On April 15, 2015, it was announced Nokia (NOK) plans to acquire Alcatel-Lucent (ALU). Despite market excitement that NOK will become a networking giant big enough to take on Ericsson, M&A enthusiasts have overlooked one glaring detail: part of ALU's technology is restricted from transfer without the express consent of the U.S. Government's security agencies, including parts of its patent portfolio.

During merger negotiations between ALU and NOK, the French government was consulted to include the creation of a \$100 million fund for French start-ups as part of the acquisition agreement. However, it appears that the U.S. Government has not pre-cleared the deal. Given the nature of ALU's business with intelligence entities and other restricted parties, there are national security restrictions that limit the commercial options associated with ALU's technology and patent portfolio.

Despite the 2014 sale of ALU's U.S. Government contracting subsidiary, LGS Innovations, the U.S. Government should have concerns on the ALU transaction as announced. The U.S. National Security Agency (NSA) and the U.S. Directorate of Defense Trade Controls within the Department of Defense - the enforcement arm of the International Traffic in Arms (ITAR) regulations – have broad capabilities to limit or prohibit the sale or other transfer of parts of the ALU portfolio.

The Committee on Foreign Investment in the United States (CFIUS), retains expansive power to limit commercial deployment of ALU properties. It is the entity which imposed conditions on the 2006 Lucent–Alcatel merger related to sensitive technologies from Bell Labs. Furthermore, CFIUS reserves the right to review and revoke their approval of the original merger if the parties violate any provision of the agreed terms.

Analysis

Using proprietary analytical systems, M·CAM found ALU technology which was created with funding from U.S. Government contracts. The government has march-in rights to these technologies. One such example is listed below:

Document #	Title	Assignee Name	Priority	File	Issue
	CMOS-compatible tunable microwave photonic band-stop				
US 8,014,676	filter	Alcatel Lucent	22-Feb-08	22-Feb-08	06-Sep-11

The description of this patent reads the following: "This invention was made with Government support under Contract No. HR0011-05-C-0027 awarded by Defense Advanced Research Projects Agency (DARPA) under the EPIC (Electronic and Photonic Integrated Circuits) program. The Government has certain rights in this invention."

This is not the only patent which is fully impaired by the U.S. Government, by far. Once regulatory bodies such as CFIUS and ITAR become completely aware of this transaction and its full implications, the acquisition may not go as planned.

For further information on impairments to the Nokia acquisition of Alcatel-Lucent, please email patentlyobvious@m-cam.com.

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M·CAM's Patent Glossary

Aligned Sector: The business sector in which the product(s) resulting from the patent(s) is currently or intended to be sold.

Applicant: The person or corporation that applies for a patent with the intent to use, manufacture or license the technology

of the invention; under U.S. law, except in special situations, the applicant(s) must be the inventor(s).

Application: Complete papers submitted to the U. S. Patent and Trademark Office seeking a patent including oath,

specification, claims, and drawings. This usually does not signify a Provisional Patent Application, but only a

regular patent application.

Art: The established practice and public knowledge within a given field of technology. This also identifies a process or

method used to produce a useful result. A term used in consideration of the problem of patentable novelty encompassing all that is known prior to the filing date of the application in the particular field of the invention.

Assignee: The person(s) or corporate body to whom the law grants or vests a patent right. This refers to the person or

corporate entity that is identified as the receiver of an assignment.

Business Method

Patent: A patent that controls the way a business process is undertaken. The issuance of these patents by the United

States Patent and Trademark Office (USPTO) is new and controversial, since many allege that it is unfair to allow

a patent on a way of doing business.

<u>Citation</u>: This may include patents or journal articles that the applicant or examiner deems relevant to a current

application. A reference to legal authorities or a prior art documentation are examples of a citation.

<u>Claim</u>: The language in a patent application that defines the legal scope of the patent. Most patents have numerous

claims. This is typically the single most important section in the application.

<u>Concurrent Art</u>: Concurrent art occurs when related patent applications are being examined by the USPTO at the same time. It is

difficult for any company or inventor to know, at the time they file for a patent, whether a "related" patent

application exists.

Filing Date: The date when a properly prepared application reaches the patent office in complete form.

Innovation Cycle: A description of the commercialization timeframe for the intellectual property.

Innovation Space: M·CAM's representation of the innovation(s) that occur before, during, and after the pending period of the

subject patent. The innovation space is the first place to look for patents that are closely related to the subject patent and that may impact the defensibility of the subject patent or create opportunities for patent licensing.

Issue Date: Not to be confused with the filing date, which is the date the patent application was physically received by the

U.S. Patent and Trademark Office. This is the date on which the patent actually issues.

Non-Aligned

<u>Sector</u>: Any sector in which the patent can be used or sold, other than the sector for which the patent or resultant

product was invented or intended.

Pod: A group of patents owned by a company that should be treated as a single unit of innovation (e.g., a certain

group of patents that comprise a single product or multiple related products).

<u>Prior Art</u>: Any relevant patent that was issued before the patent being analyzed. If this previous patent was specifically

mentioned in the new patent's application, the previous patent is referred to as "cited prior art". If it was NOT

mentioned, then that previous patent is referred to as "uncited prior art".

Subsequent Art: Any patent that has a filing date with the USPTO that is after the issuance date of the subject patent. This

subsequent art patent may or may not have cited (see "Citation" above) the subject patent. As subsequent art represents more recent innovation than the subject patent, it has great potential to shrink the market

opportunity for the subject patent.

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A Brief Primer on the Patent System

In recent years, the importance of patents and intellectual property rights as an important variable in the marketplace has come to the forefront of the public consciousness as world leaders declare their country's lead in the innovation race. Damaging intellectual property litigation is becoming increasingly common across all industries. This is exacerbated when patent rights are granted for non-novel ideas. A vast amount of precedent innovation is unconsidered by patent-granting authorities in the creation of new IP rights. Patent granting authorities including the United States Patent and Trademark Office (USPTO), European Patent Office (EPO), Japanese Patent Office (JPO), Chinese State Intellectual Property Office (SIPO), Korean Intellectual Property Office (KIPO) and many others are constrained by the use of patent classification systems which are routinely circumvented by patent applicants.

There is a two-way social contract underlying the patent system. In the United States, patent terms are generally limited to 20 years from the date of application. By statutory intention, once a patent has expired, the patent holder loses the right to exclude others from fully utilizing any innovation described in the patent. A large number of patents enter the public domain when they are "abandoned" – when owners discontinue paying patent maintenance fees. Patents also only provide an exclusionary right in the country for which the patent is filed. As demonstrated by the Global Innovation Commons¹ (G.I.C.), using intellectual property available in the public domain eliminates the need to pay licensing fees on those innovations in countries where the patent was never registered, or worldwide, if abandoned.

Patently Obvious® is a weekly report focusing on select groups of patents in order to increase transparency in markets, addressing information asymmetries, and providing a more level playing field for all parties.

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¹ http://www.globalinnovationcommons.org/