Examining Apple’s Blockbuster Purchase of Intel’s Assets

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Accessing the Slides
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Earlier this summer, Intel announced that some 8,500 patent assets (i.e., issued patents and pending patent applications) would be auctioned. Approximately 6,000 assets related to 3G, 4G, and 5G cellular standards, while 1,700 assets relate to wireless implementation of cellular standards.

Shortly after the Intel patent assets being announced as available for sale, Intel abruptly took the assets off the market in favor of negotiating with a single interested suitor. Very quickly news broke that the negotiations with that unidentified suitor were quite advanced, suggesting that the Intel auction announcement was nothing more than a negotiating ploy.

It has recently come to light that the unidentified suitor for the Intel patent assets was none other than Apple, just as IAM has predicted in its initial reporting.

We now know that Apple will buy the majority of Intel’s Modem business, including the patent assets, for $1 billion.

Today, we will discuss the Intel patent assets, the strength of the Intel patent portfolio and what this deal will mean for the 5G landscape.
What Portfolio is Intel selling?


Exclusives: Intel launches blockbuster auction for its mobile portfolio

In what looks set to become one of the highest profile patent sales in years, Intel has put its IP relating to cellular wireless connectivity on the auction block. The company is seeking to divest around 8,500 assets from its massive portfolio.

The news comes as the chip giant searches for a buyer for its 5G smartphone modem business having announced in April that it was pulling out of the market. That was after as it had become increasingly clear that the company, which has been the supplier of 4G modem chips to Apple for the last few years, was struggling to release a 5G product even though the rollout of the next generation of mobile technology is well underway.

The auction offering is comprised of two parts: the cellular portfolio and a connected device portfolio. The former includes approximately 6,000 patent assets related to 3G, 4G and 5G cellular standards and an additional 1,700 assets that read on wireless implementation technologies. The latter is made up of 500 patents with broad applicability across the semiconductor and electronics industries. Although that represents a large portion of Intel’s cellular IP it is understood that it will retain significant wireless assets.

Intel's Active Portfolio with ETSI declaration

<table>
<thead>
<tr>
<th>Active Patent Families</th>
<th>Patent Applications</th>
</tr>
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<tbody>
<tr>
<td>938</td>
<td>6,301</td>
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Inside the Intel ETSI standard portfolio
Intel’s filing strategy

Example
Provisional Application: 61/707,784

ADVANCED WIRELESS COMMUNICATION SYSTEMS AND TECHNIQUES

WHAT IS CLAIMED:

1. A method of communication in a wireless network as shown and described herein.
2. A system for providing wireless communication as shown and described herein.
3. A device for providing wireless communication as shown and described herein.

+ 314 page specification

→ 46 following US applications
Competitive Development

Portfolio Size vs. Reporting Date for various companies.
Competitive Development

Patent Asset Index™ Reporting Date

Qualcomm
Samsung
LG Electronics
Nokia
InterDigital
Huawei
Intel
Ericsson
ZTE
Apple
Technological Development

- LTE
- Beyond LTE
- Radio aspects
- "Stage 2" – Tech Realization
- "Stage 3" – Protocols
- CODECs
- "Stage 1" – Services
- Multiple radio access

Patent Asset Index™

Reporting Date

Subject by Owner

LTE
- Qualcomm
- Samsung
- Intel
- LG Electronics
- InterDigital
- Huawei
- Nokia
- Ericsson
- ZTE
- Apple

Beyond LTE

“Stage 2” – Tech Realization

Radio aspects

“Stage 3” – Protocols

CODECs

“Stage 1” – Services

Multiple radio access
Why patent analytics matter
Challenge: how to identify key patents and the companies that are currently owning them?

Key patent on relevant technology

Commercially successful product

High revenues and increase in stock price

A patent entitles its owner the right to exclude others from making, using or selling an invention for a limited period of time

Patent-protected products can be sold exclusively for up to 20 years

Being able to sell relevant products exclusively maximizes revenues and can impact stock performance
How PatentSight handles the sheer data masses

A new approach is required to efficiently identify key patents in the big data haystack

3.5 Million Patent Applications (in 2017)

About 80% of all patents have no commercial value

Global R&D Expenditures 2017

2.2 Trillion USD
PatentSight overcomes problems of insufficient data quality

Patent data is public and can be sourced from various patent offices worldwide.

Incomplete ownership information
Patents are filed by applicants; in the US, this is usually a private person (inventor) -> no direct information which company is currently owning the patent

Ambiguous legal status information
Patents have lifetime of 20 years; in this time, companies can sell business divisions or get acquired -> no complete tracking of assignments and information about remaining lifetime

Errors: Wrong translation & misspellings
Applicant names are often misspelled; especially in data from Asian patent offices -> matching of patent data without structured research is basically impossible
We collect, clean and...

Working process I

Worldwide patent data
- EPO
- USPTO
- JPO
- CNIPA
- IPDD

PatentSight database
- >100m patents

Building of patent families
- One patent family describes one invention
…enhance patent data

Working process II

Check for legal status & ownership

Check for validity and remaining lifetime

Evaluation of patent families
by a unique algorithm based on two newly developed KPIs

Individual strength of a patent family

Competitive Impact™

Patent Asset Index™

Ultimate owner concept:
See who has commercial power over the innovation!

Objective, transparent and empirically validated!

Technology Relevance™

Market Coverage™

Innovative strength of a company or portfolio (ability to achieve competitive advantage)
Thank you.

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