

Cipher Solutions Inbound Patent Assertion

Using Cipher for both Proactive and Reactive Analysis of NPEs

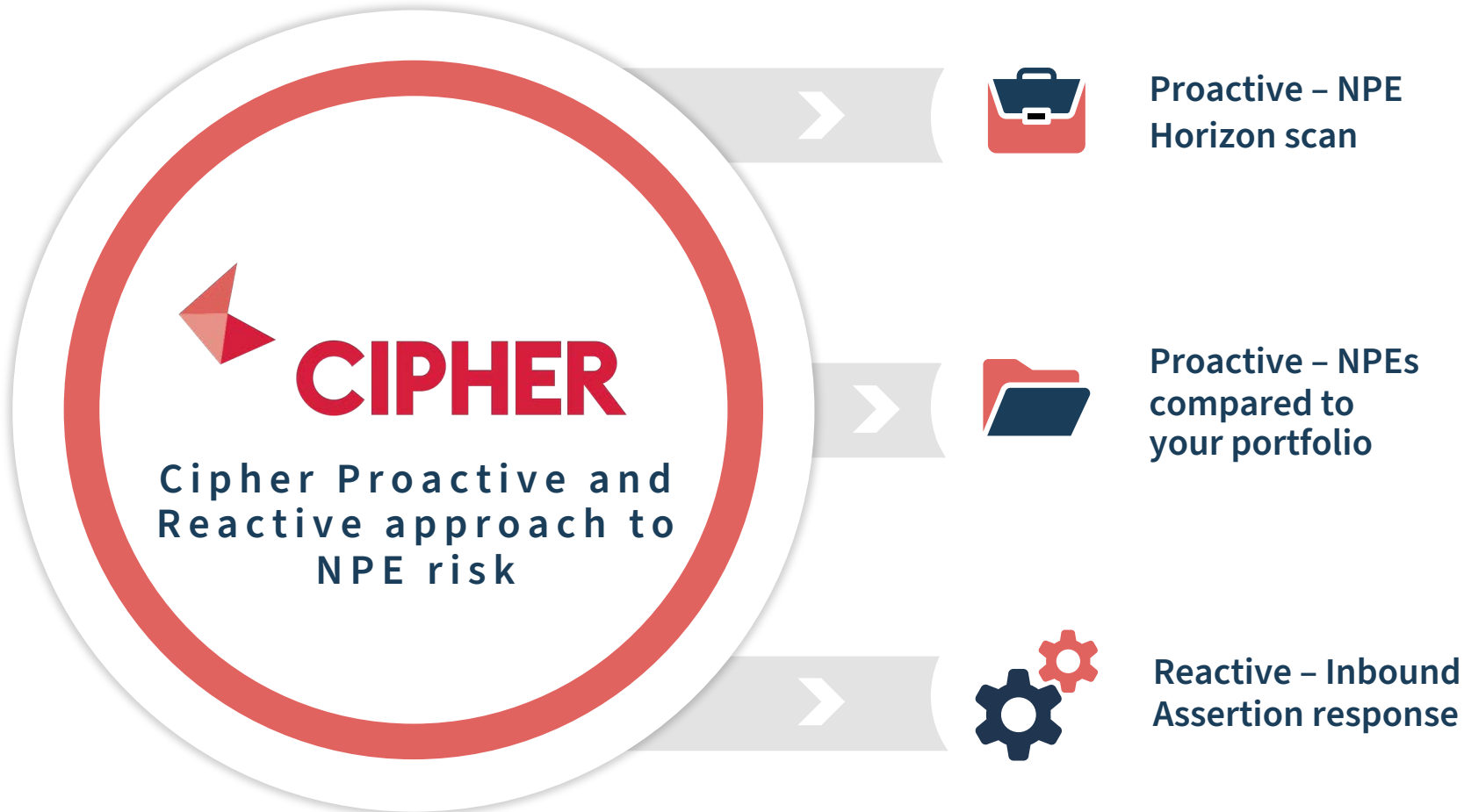


Inbound Assertion Introduction



Cipher provides easy and fast ways to proactively assess the risk of NPEs whether more broadly (we call this horizon scanning), or directly linked to you. Cipher takes a list of NPE's and breaks up their portfolios by technology to assess which areas are most likely to be a hotbed of litigation, and how these areas link to your portfolio.

Cipher also ensures that in the event of an Inbound Assertion, you can easily and quickly assess which assets relate to your portfolio, and which do not. You need to be able to respond to any patent litigation quickly. With Cipher you can efficiently and effectively assess the relevance of large portfolios and be equipped with an evidence based response to the threat.



“Whatever your perspective, no-body wants to be unprepared for litigation. In today’s environment, the risks are so large that you want to be ready. While figuring out whether you have a balanced portfolio is hard, it’s something that more and more companies are taking very seriously.”

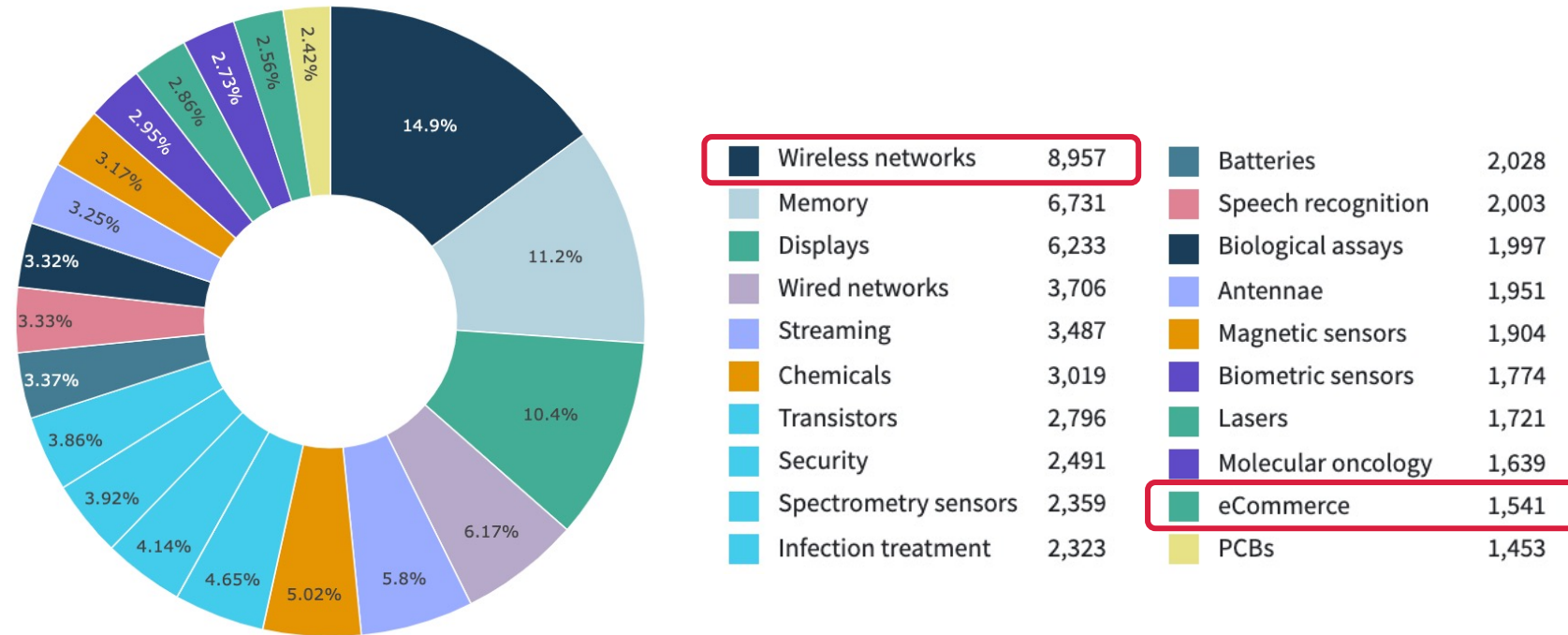
Erik Oliver, COO,
Richardson Oliver Insights

01

Proactive – NPE Horizon Scan

Assess the risk of NPEs across all technology
areas

SIZE| In which technology areas do NPEs own patents?



[Click here to access this Cipher chart](#)

SIZE – Number of Active Families, By Technology

How many active (pending & granted) families do NPEs own, across all Technology areas globally*?

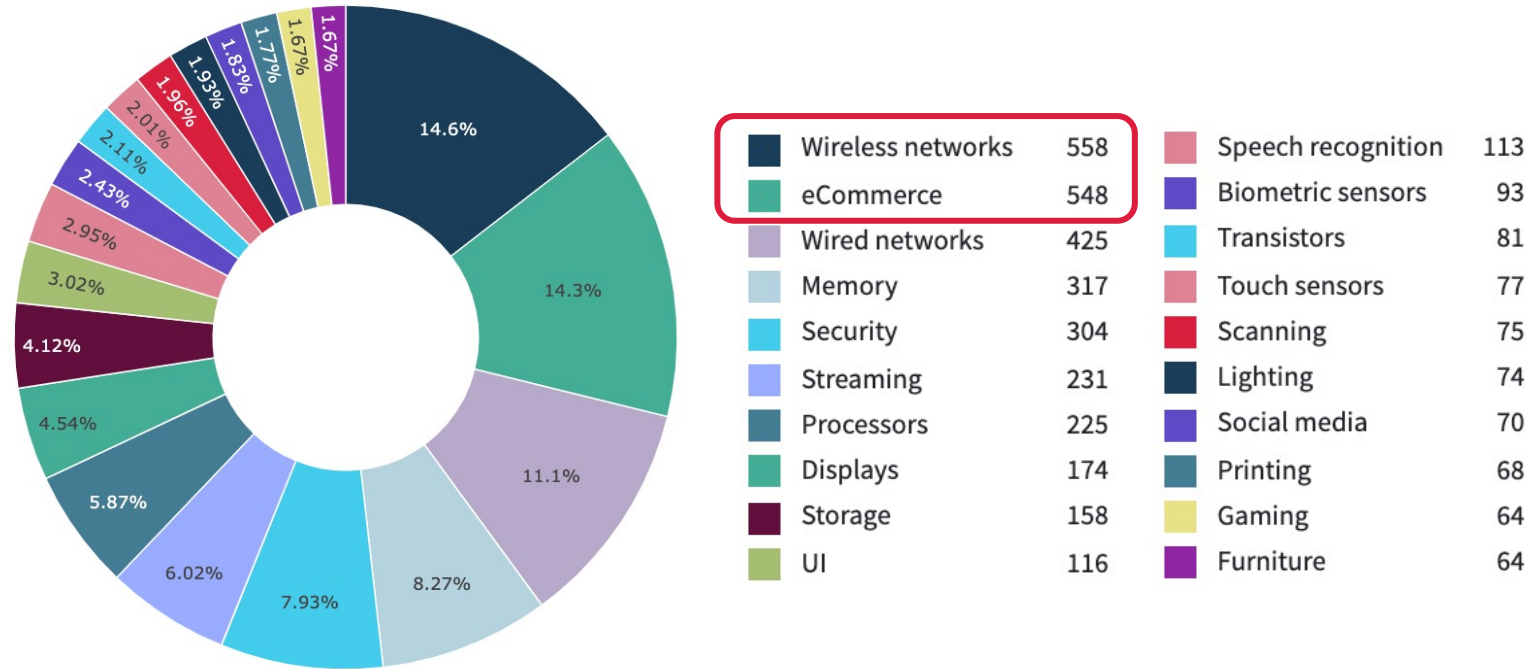
**(The Cipher Universal Technology Taxonomy or UTT)*

Do these relate to any of my technology areas? Are these any tech areas I'm looking to move into?

This chart shows us which technology areas NPE's hold most patent families in. This chart defaults to show the top 10 tech areas, but you can expand this to ensure you're seeing what matters to you.

What is interesting in terms of ownership in these technology areas, is that wireless networks is at the top in terms of NPE ownership, whilst e-commerce is further down the list as the 19th biggest area for NPE's.

DISPUTES | In which tech areas are NPE's heavily asserting?



[Click here to access this Cipher chart](#)

DISPUTES– Litigated Families By Technology

In which technology areas are NPE's most heavily asserting their patents?

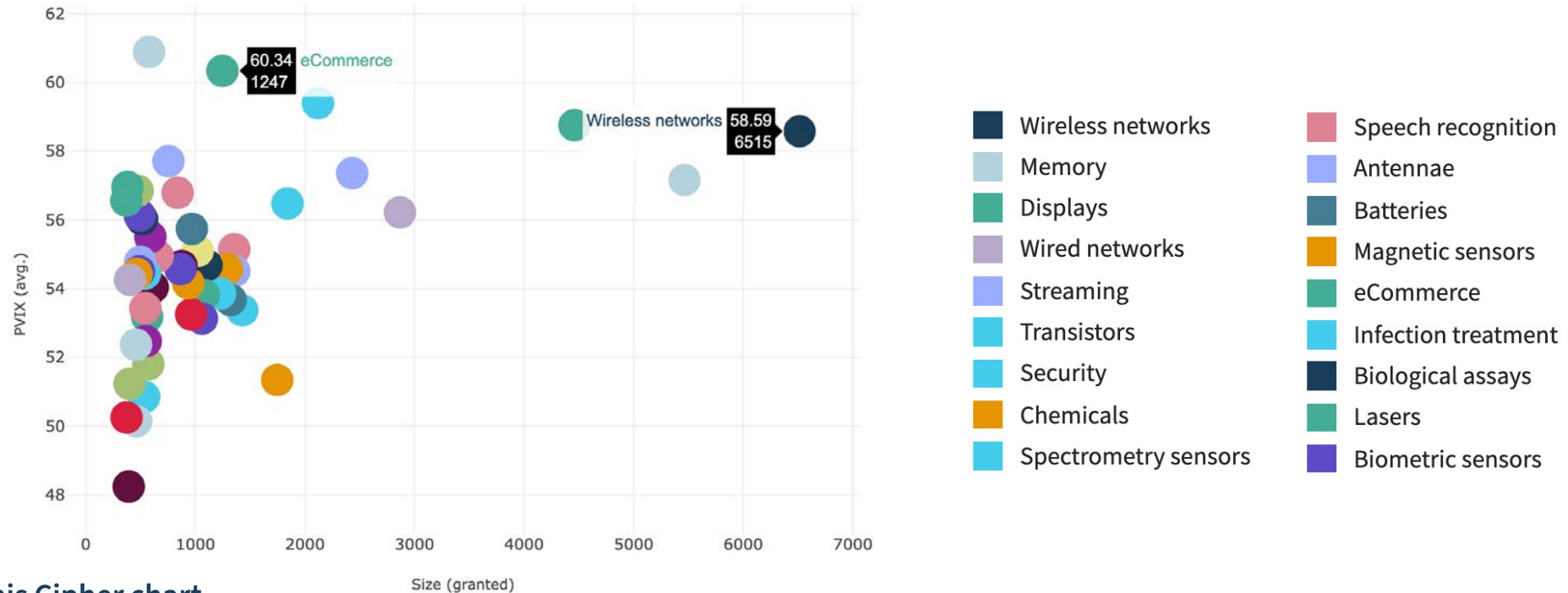
How does the level of assertion compare to the NPE ownership of assets in these areas?

Are there a large number of assertions in tech areas that matter to me?

In the size chart prior to this, wireless tech was high in terms of ownership and e-commerce was relatively low, but we can see here that whilst ecommerce is relatively low in terms of NPE ownership (2% overall) it is disproportionately highly litigated in.

This means that if I held patents in ecommerce, I should probably begin assessing families that had been asserted, who they were asserted against and the NPE's involved, in more detail.

PVIX/STRENGTH | In which tech areas are the strongest assets held amongst NPEs?



[Click here to access this Cipher chart](#)

PVIX - Average PVIX, by technology and size

This PVIX size comparison chart breaks apart the number of granted families within a technology, and the strength (average PVIX score).

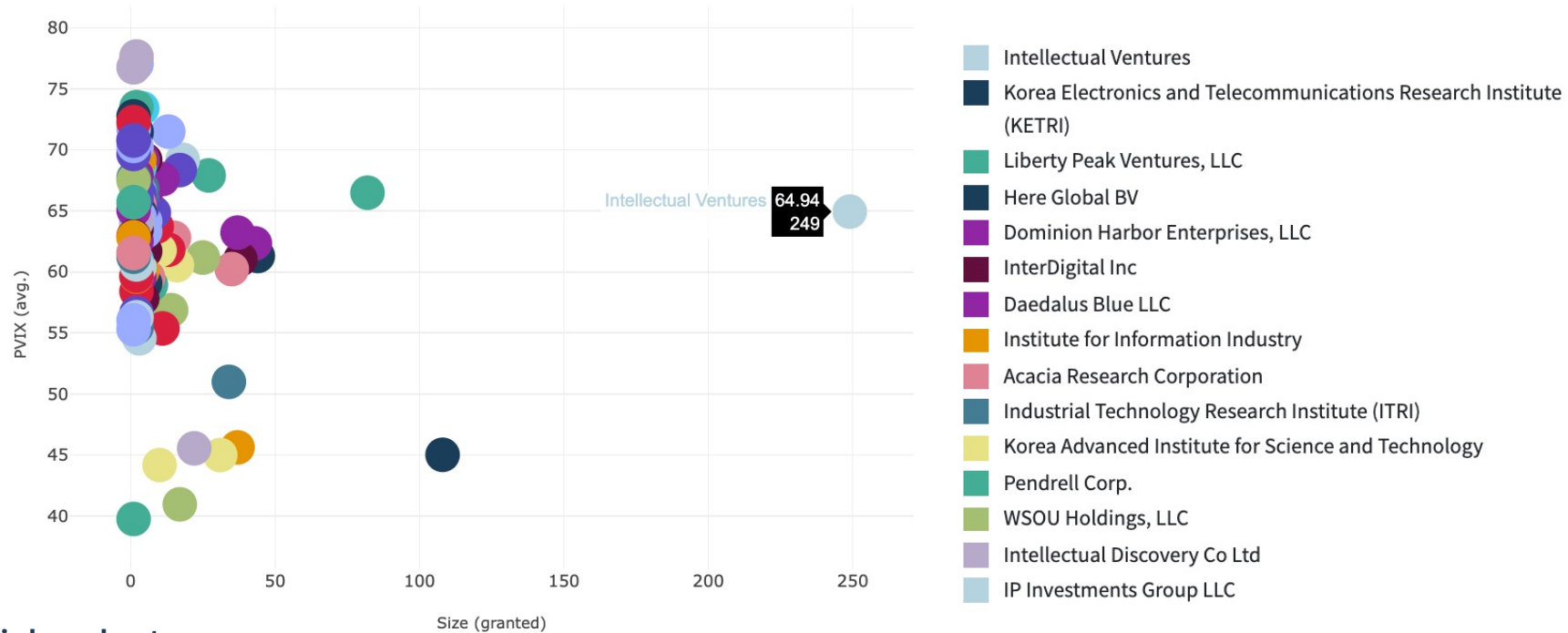
In which tech areas are there high quality assets amongst the NPEs? How does this compare to the size of the portfolio in each tech area?

Are these tech areas relevant to my portfolio?

Here we're looking at the average PVIX quality score in these tech areas, compared to the granted ownership amongst NPEs. We can see that ownership of granted families is higher in Wireless networks (6515) than ecommerce (1247), however in this chart we can also compare the quality of these assets.

By hovering over the dots, you can see that the ecommerce assets owned by NPEs score marginally higher in terms of quality (60.34) than those owned in wireless networks (58.59). If you hold a portfolio relating to e-commerce you might want to investigate NPE ownership and litigations in this area further.

PVIX/STRENGTH | Which of these NPEs hold the strongest assets?



[Click here to access this Cipher chart](#)

PVIX - Average PVIX, by organisation and size

This PVIX size comparison chart breaks apart the number of granted families an organisation has, and the strength (average PVIX score).

Which NPEs own high quality assets? How does this compare to the size of their portfolio?

Who is my biggest threat amongst the NPEs?

We could look at the quality of an NPEs portfolio as a whole in this chart, but following on from our prior analysis, I'm interested in top NPE owners and quality in the area of ecommerce. I've filtered to e-commerce in my report, for this view in this chart.

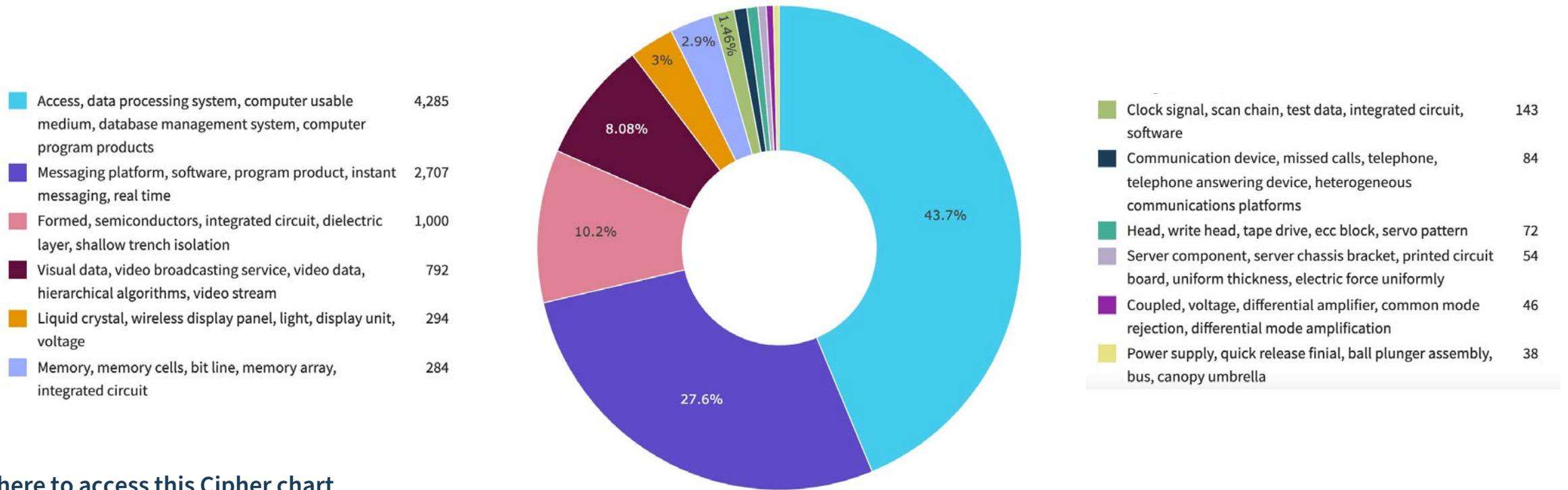
We can click on any of the dots to review the individual quality scores, and patent family detail. What we're trying to ascertain here is: should it come to it and we get asserted against by one of these companies we have identified, how strong is their portfolio? The assumption being the stronger the portfolio, the more troublesome it will be. We should be worried if an NPE has a large portfolio of high quality, in an area we're operating in.

Proactive – NPE scan by portfolio

02

Assess the risk of NPEs specific to your
technology areas

SIZE| In which of our technology areas do NPEs own patents?



[Click here to access this Cipher chart](#)

SIZE – Number of Active Families, By Organisation

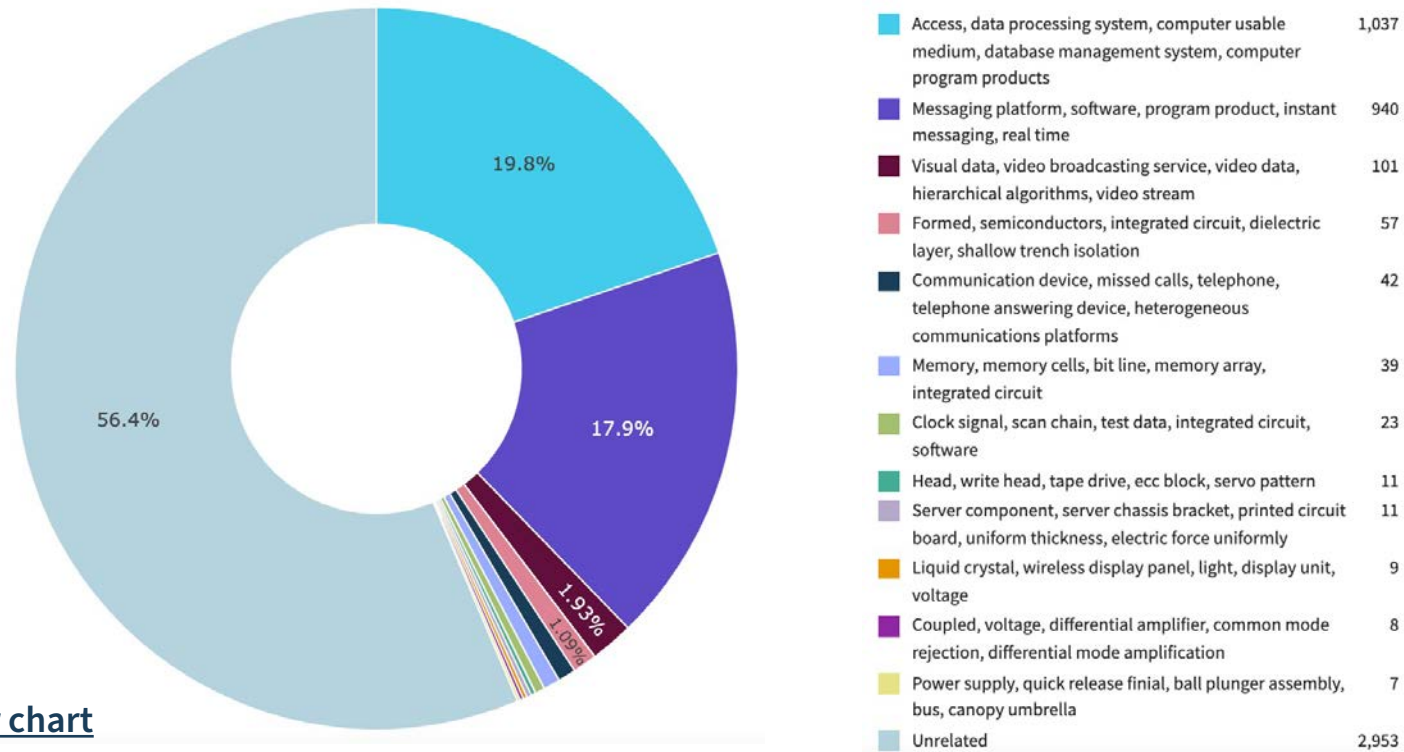
How many active (pending & granted) families do NPEs own, across my technology areas*?

**(using Cipher clustering)*

How much of the NPE ownership is relevant to my portfolio?

In this report, Cipher has built technology clusters around Twitters portfolio and then shown which NPEs patent families relate to these tech areas. Here we see the NPE ownership of active patent families as defined by Twitters portfolio. There are hundreds of families that NPE's own, but Cipher gives you a clear breakdown of the parts of your portfolio that are more exposed, alongside what they actually are. We can of course drill down to individual NPEs and review their portfolio compared to our own if need be, or if we're already aware of any specific threats.

DISPUTES | In which of our tech areas are NPE's heavily asserting?



[Click here to access this Cipher chart](#)

DISPUTES– Litigated Families By Technology

In which of my technology areas are NPE's most heavily asserting their patents?

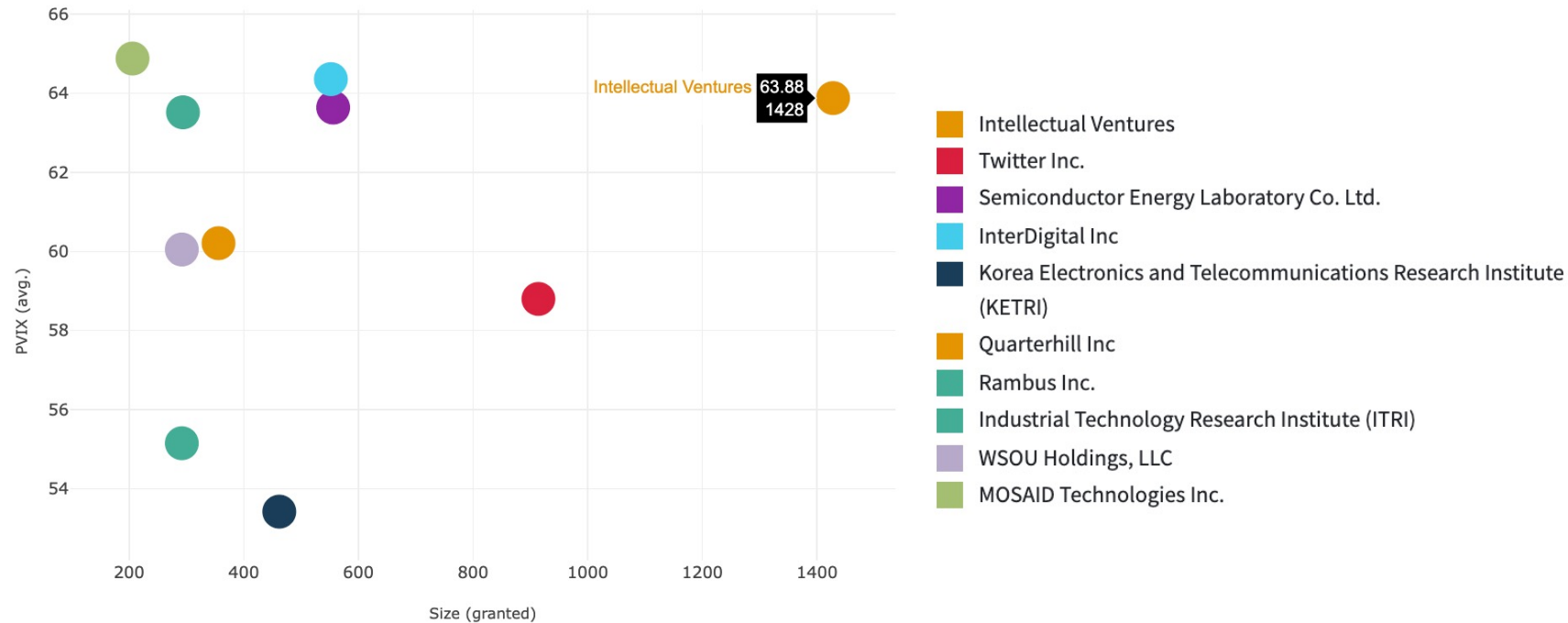
Are there litigations in a tech area of mine that I was unaware of? Are there a large number of assertions in tech areas that matter to me?

Who have these assertions been against?

We can see that the density of litigations in Twitter's tech areas are high and so we might want to review subsequent charts looking at litigation by organisation to see which NPEs have asserted in these tech areas, and even the patent families involved in these suits.

We could even take a look at how many times these families have been asserted, and whether it was against particular competitors of ours. All of this feeds into the risk that we may be facing.

PVIX/STRENGTH | Which NPEs hold the strongest assets related to our portfolio?



[Click here to access this Cipher chart](#)

PVIX - Average PVIX, by organisation and size

This PVIX size comparison chart breaks apart the number of granted families an organisation has, and the strength (average PVIX score).

Which NPEs own high quality assets in our tech areas? How does this compare to the size of their portfolio?

Who is my biggest threat amongst the NPEs?

Here we can review the quality of an NPEs portfolio across all of the tech areas relevant to our portfolio (Twitter), to see who could be our biggest threat. This would also involve reviewing assertions that they have made against others (see Disputes – litigations by org chart). You can see here that Intellectual Ventures have the highest granted estate and also have a high quality score in Twitters tech areas. You could also choose to filter to individual tech areas relevant to Twitters portfolio to see how the ownership and quality changes amongst the NPEs.

What we're trying to ascertain here is: should it come to it and we get asserted against by one of these companies we have identified, how strong is their portfolio? The assumption being the stronger the portfolio, the more troublesome it will be.

A close-up, high-magnification photograph of a hand wearing a blue nitrile glove. The hand is holding a precision tool, possibly a micro-soldering iron or a fine-tipped drill, which is emitting a bright orange glow at its tip. The background is blurred, showing more of the hand and the tool.

Reactive – Inbound Assertion

03

In the event of an inbound assertion, easily and quickly assess which assets relate to your portfolio, and which do not.

How can you tackle inbound patent assertion?

In the case where it's a **small number of patents** it's a difficult job. But at least **each patent can be assessed easily**

In the case where there's **hundreds or thousands of patents being asserted** the problem is more difficult. Data suggests this occurs in approximately **41% of cases***

It's not possible to **individually assess each patent** before responding to the asserter, so there's a challenge to figure out **which patents** in the asserted portfolio are **relevant to the business**, and fast!

* Lemley, Mark A. and Richardson, Kent and Oliver, Erik, *The Patent Enforcement Iceberg*. Stanford Public Law Working Paper, 97 Texas Law Review 801 (2019)

The Cipher Solution

Cipher can
**segment the asserted
portfolio**
into patents that:

1 Directly read onto your internal taxonomy

**2 Are shown as related to your existing portfolio (adjacent
technologies)**

3 Relate to your area of business, but are not core technologies

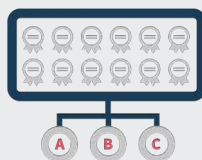
What remains are patents that are
not relevant to your business
and can be
left out of negotiations
(unrelated assets)

1



Identify patents
relating to client's core
technologies, using
their own taxonomy

2



Process the
unclassified patents to
find any in adjacent
technologies to the
clients' own portfolio
using Cipher clustering

3



Process the remaining
unclassified patents
with products from
either the Universal
technology taxonomy
or the AST Product
Taxonomy

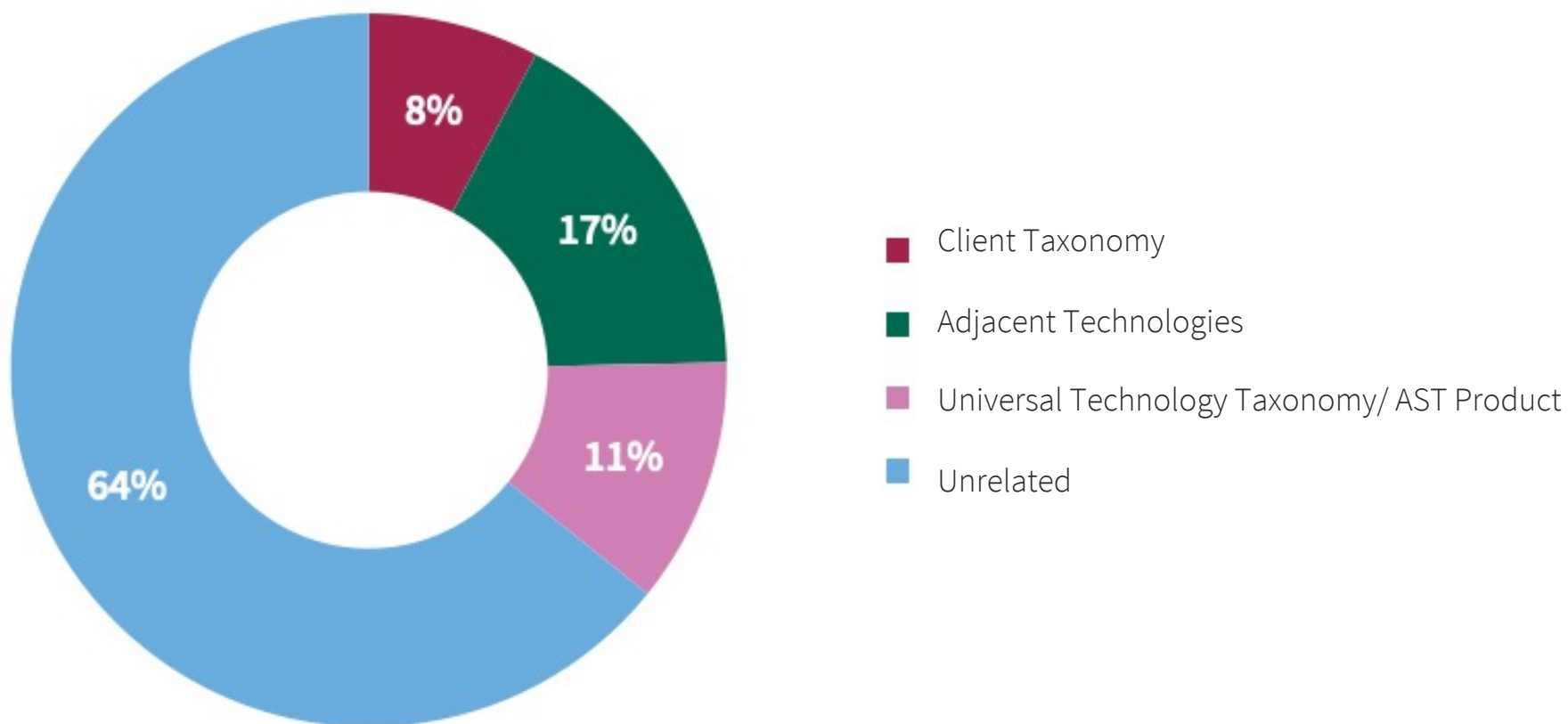
4



Present the results
back to the client,
clearly showing which
patents fall into which
category

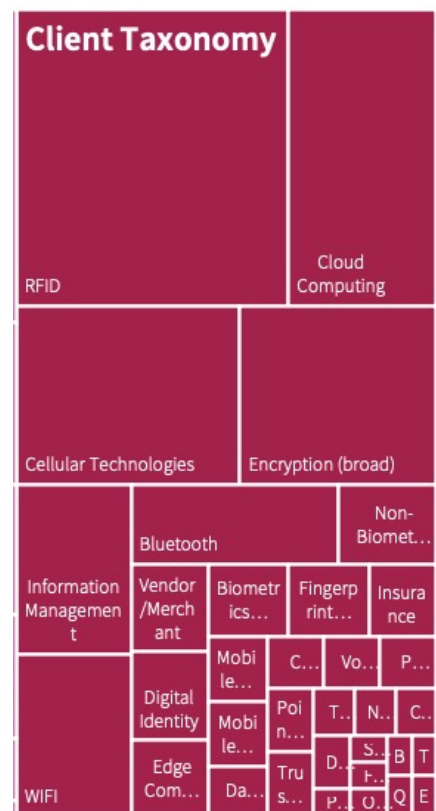
A showcase example | Intellectual Ventures' portfolio

4,500 Intellectual Ventures families filtered by relevance to a client 's technologies

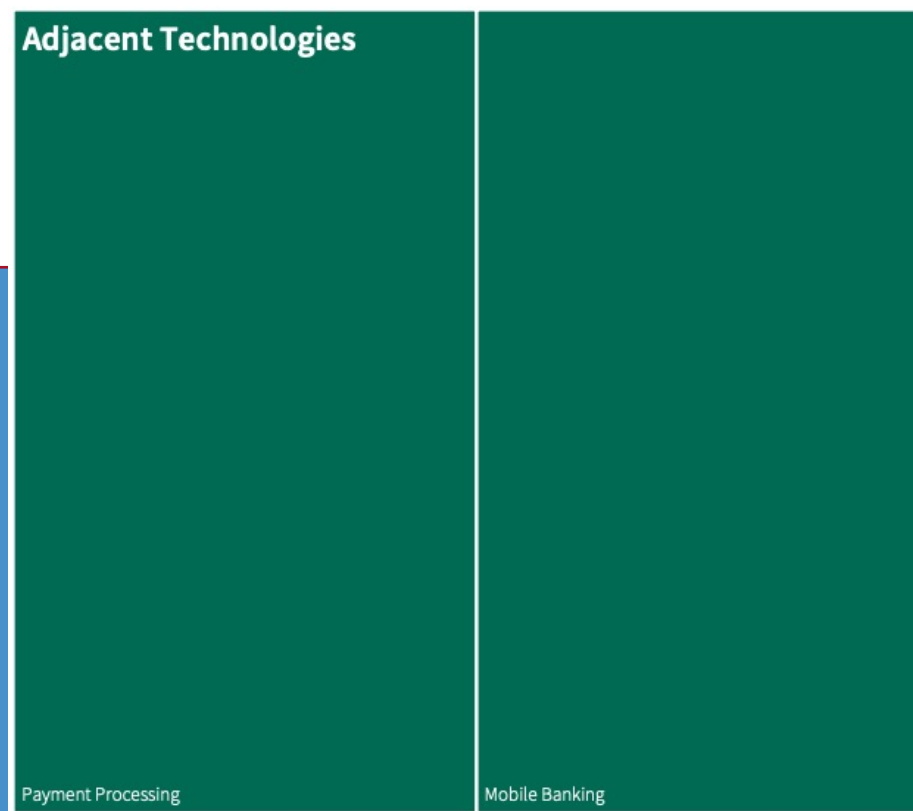


Granular view of related assets

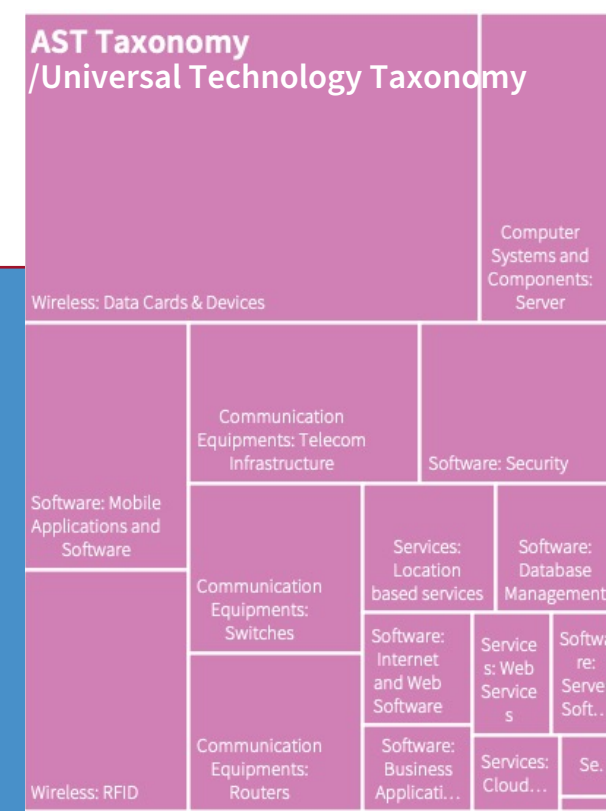
1 Directly read onto your internal taxonomy - relevant



2 Are shown as related to your existing portfolio (adjacent technologies) - relevant



3 Relate to your area of business, but are not core technologies - You might want to consider a license for these



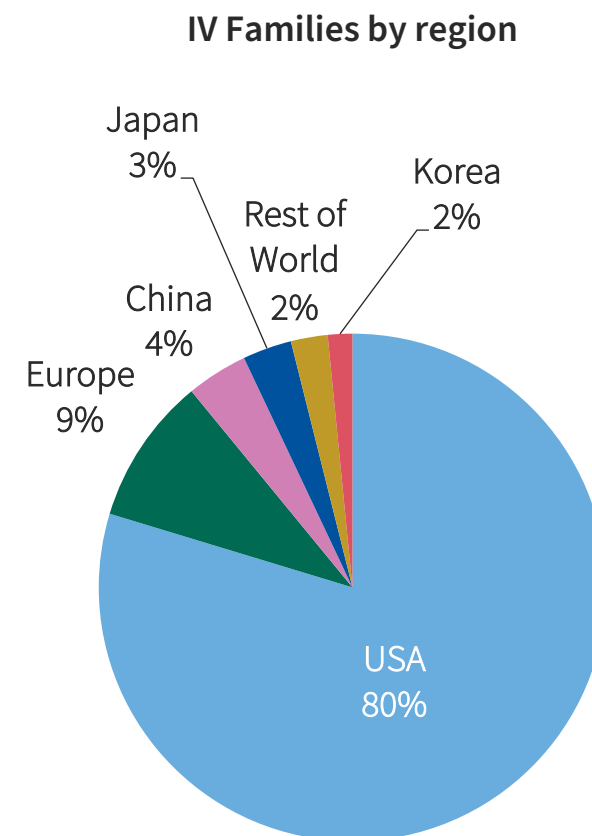
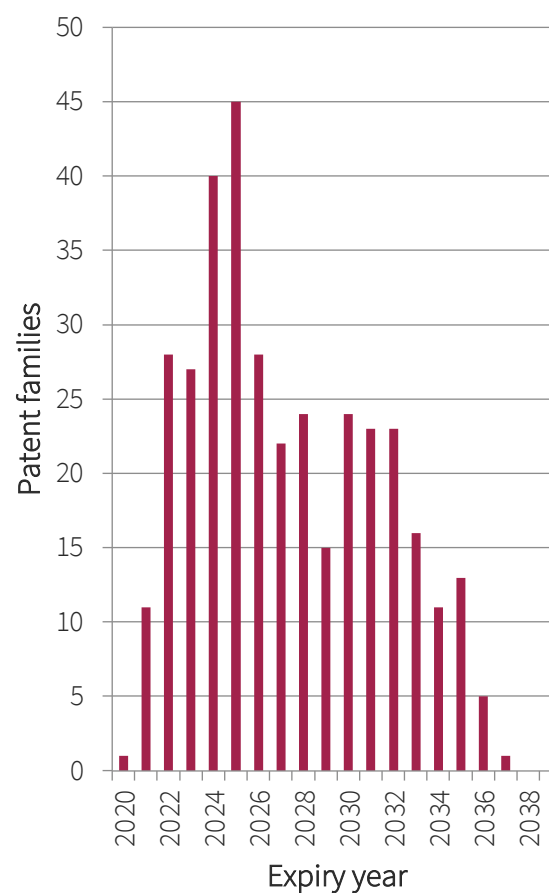
not relevant to your business and can be left out of negotiations **Unrelated Assets**

Sample analysis from Cipher

Cipher also delivers a report outlining main findings to inform the licensing conversation

Factors to consider: Quality, Age, Geography

Quality Score	Company A	Intellectual Ventures
Financial Applications	63.32	50.35
Mobile Banking	57.60	56.15
Authentication	61.25	57.98
Credit Cards	71.38	58.23
Peer to Peer Transactions	65.12	60.76
Fingerprint Scanning	52.15	60.81
RFID	58.78	61.21



Cipher Help Centre information and useful links

- [How to run an organisation & classifier report](#)
- [How to run a clustered report](#)
- [What is the Universal Tech Taxonomy \(UTT\)?](#)
- [Cipher organisation sets - NPEs](#)
- [How to interpret Cipher Datasets](#)
- [Data Sources](#)
- [Cipher PVIX Strength metrics](#)

Cipher Reports:

Proactive - [NPE Horizon Scan](#)

Proactive - [NPE Scan by Portfolio](#)

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CIPHER