PIPX Intellectual Property Sector Index

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Introduction

The last few years have been an exciting time in the intellectual property licensing business. We've seen record amount of money in headlines, increased interest by investors to participate in this sector, and a growing recognition of intellectual property as a major asset class and its monetization as a serious business. As this sector grows and matures, it will be interesting to track its performance to see what we can learn about its performance both in absolute terms and compared to the broader market. To this end the PIPX Index was created to track the financial performance of the sector. Somewhat surprisingly, observation of the index reveals some potential issues with the performance of the sector.

Composition and description of the PIPX index

The PIPX index is designed to provide a measure of the market value and hence the health of the intellectual property licensing business. The index consists of 12 companies with a primary focus of licensing and enforcement of patent intellectual property. The companies included in the index are listed in Table 1. In addition to a focus on intellectual property, there are two additional criteria for inclusion in the index. The first is that they must be publically traded companies, so that a market value can be established for the company on a daily basis. For this reason a number of prominent intellectual properly licensing companies are not included, such as Intellectual Ventures, Conversant, and IPNav. The second is that they must also have a market capitalization greater than $100M in order to provide a level of stability and minimize the number of companies popping into and out of the index. This excludes some smaller companies that may be added to the index later if they grow to and maintain a market capitalization of greater than $100 million.

Table 1 – Intellectual Property Licensing Companies Included

Acacia Research	Interdigital	Vringo	VirnetX
Wi-LAN	Unwired Planet	Tessera	Rambus
RPX	Parkervision	Pendrell	Neonode

The index is a capitalization-weighted price-return measure of the change in value of this segment of publically traded companies. The effect of dividends and daily changes in the number of shares outstanding are not included. The index is initiated with a value of 100 on July 1, 2011. This date was chosen to avoid what would be several significant disruptions to the index, namely the RPX initial public offering in May 2011, the initial listing of Wi-LAN on the NASDAQ in April 2011, and the taking private of MOSAID in Oct 2011.

Figure 1 shows the performance of the IPX index starting from July 2011 through March 31, 2014. Somewhat surprisingly, given the amount of interest and attention provided to IP licensing in recent years, the index trends down from July 2011 to about the middle of 2012 and from there has been relatively flat. This performance stands in contrast to that of the broader economy and of publicly traded companies in general. Figure 2 compares the PIPX to the S&P 500 over the period of interest. Unlike the PIPX, the S&P 500 consistently increases over the same period.

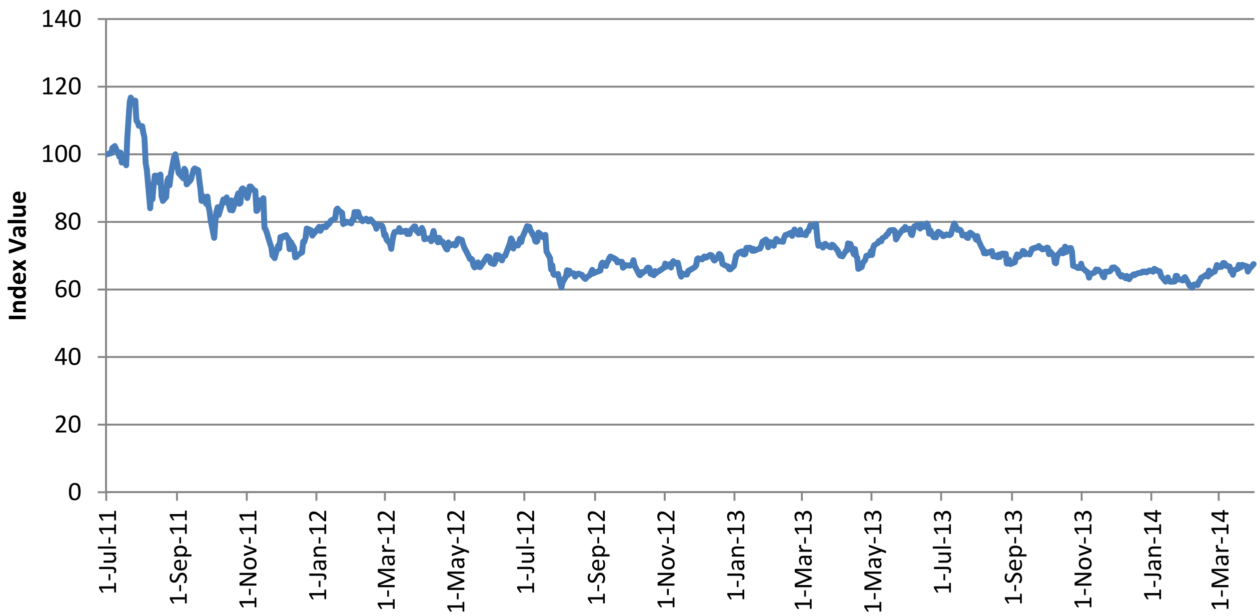

Figure 1 – PIPX Index Value

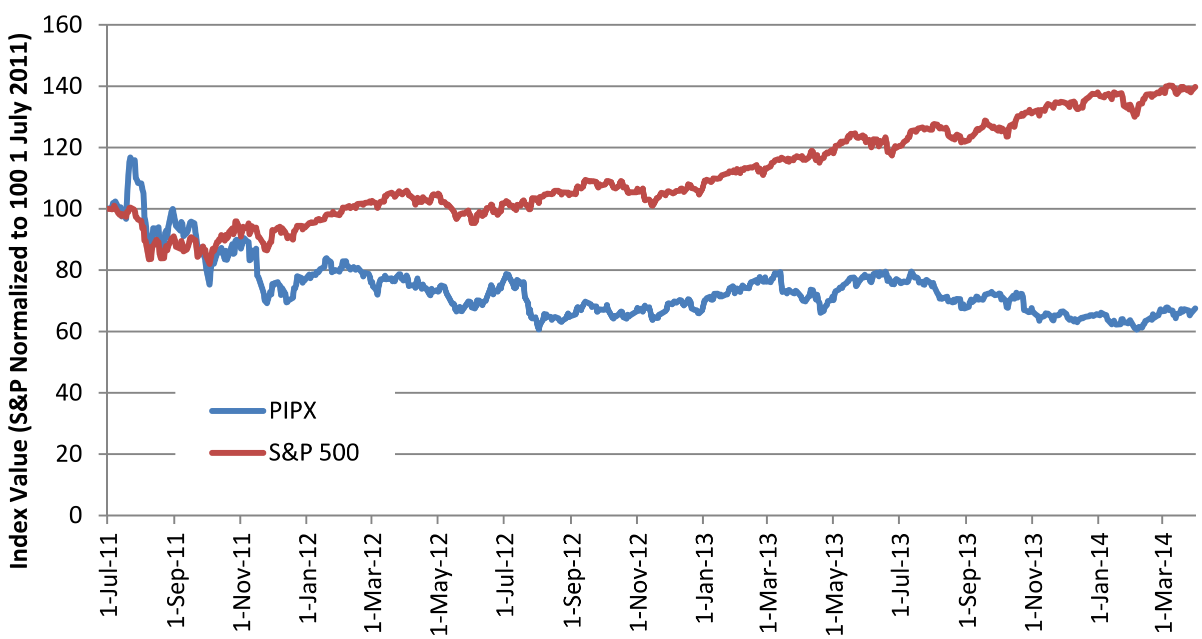

Figure 2 – Comparison of PIPX to S&P 500 (S&P 500 normalized to 100)

What is behind the decline in the PIPX?

With all the recent attention and excitement around intellectual property as a business and investment opportunity, the poor performance of the index in comparison to the S&P 500 is somewhat surprising. It would be helpful to better understand the drivers of the decline.

Figures 3 and 4 show the share of each component company of the PIPX Index on March 31, 2014 and July 1, 2011, respectively. The comparison between the end of first quarter 2014 and the start of the index shows the relative fraction of each company is relatively stable over the time period. Thus the decline in the index is not due to a big change at any one specific company but is attributable to a general decrease in market capitalization across the pool of companies.

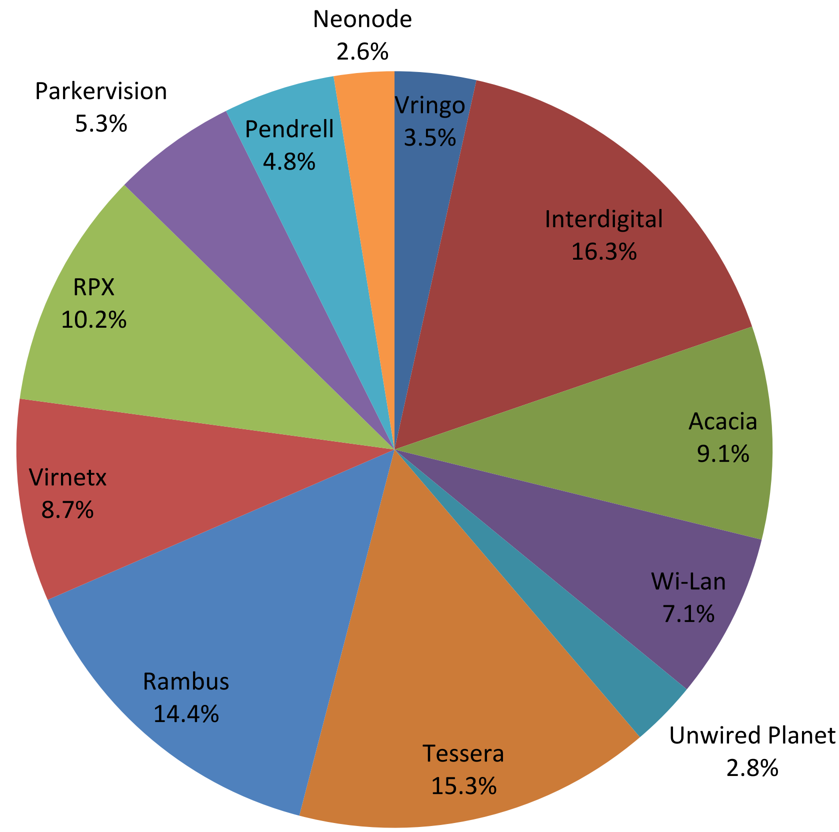

Figure 3 – Share of the PIPX Index by Company, March 31, 2014

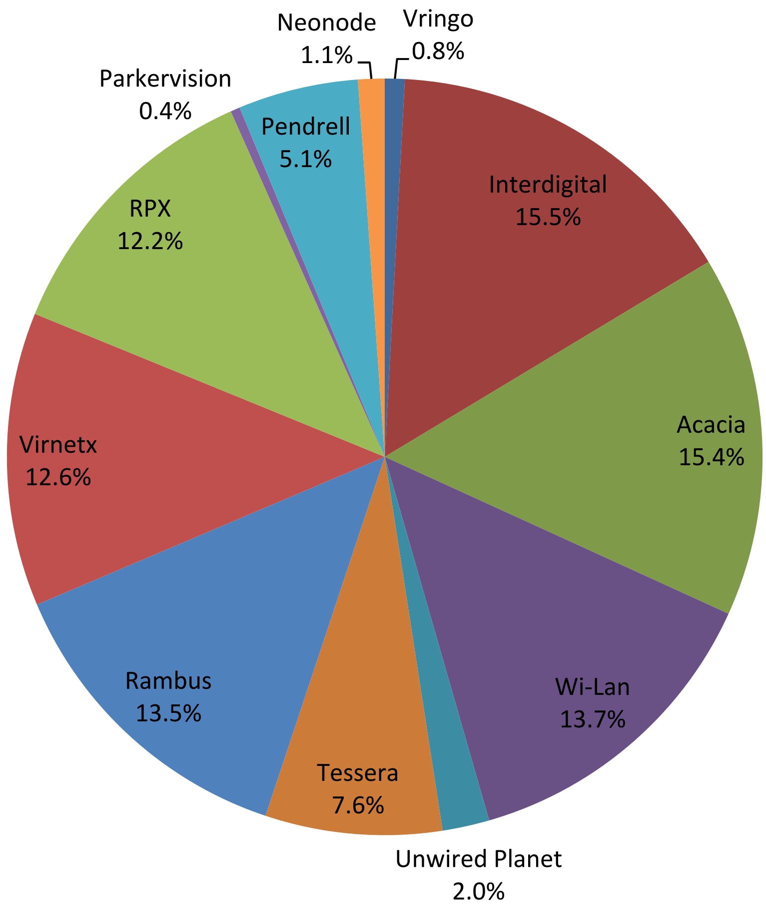

Figure 4 – Share of the PIPX Index by Company, July 1, 2011

As it turns out, the start date of the IPX Index, July 1, 2011 is coincidently the day of the Nortel patent sale to Rockstar. This was clearly a time of heightened interest in all things patent related, often referred to as a patent bubble. Could the decline be attributed to the deflating of an IP related bubble?

Looking at the historical performance of component companies, we do see that Acacia, Interdigital, and Wi-LAN all had peak five year share prices in the months around July 2011. So the decrease in their market capitalizations could be related to a cooling of interest in the IP space. Similarly, RPX's share price has declined significantly from its peak around the time of its May 2011 IPO. However, Rambus' and Tessera's share prices peaked well before July 2011 and had steadily declined in the prior year, so their performance from July 2011 to the end of 2013 is not inconsistent with that in the years prior.

On the positive side, Vringo and Parkervision have seen significant increases in share price since July 2011. However, given their relatively small size their growth is not enough to offset the declines in the companies that make up a larger component of the IPX index.

Volatility of the IPX Index

On other thing to notice about the IPX index is that it is also more volatile than the broader market S&P 500. Figure 5 compares the volatility of the IPX to that of the S&P 500. While the volatility level of the IPX generally tracks that of the S&P 500, it is roughly twice as volatile. In general, higher volatility investments are deemed riskier and consequently are expected to have higher returns to offset the increased risk. Yet the IPX Index shows that despite higher volatility returns are lower than the broad market, a fact which likely serves to further depress returns.

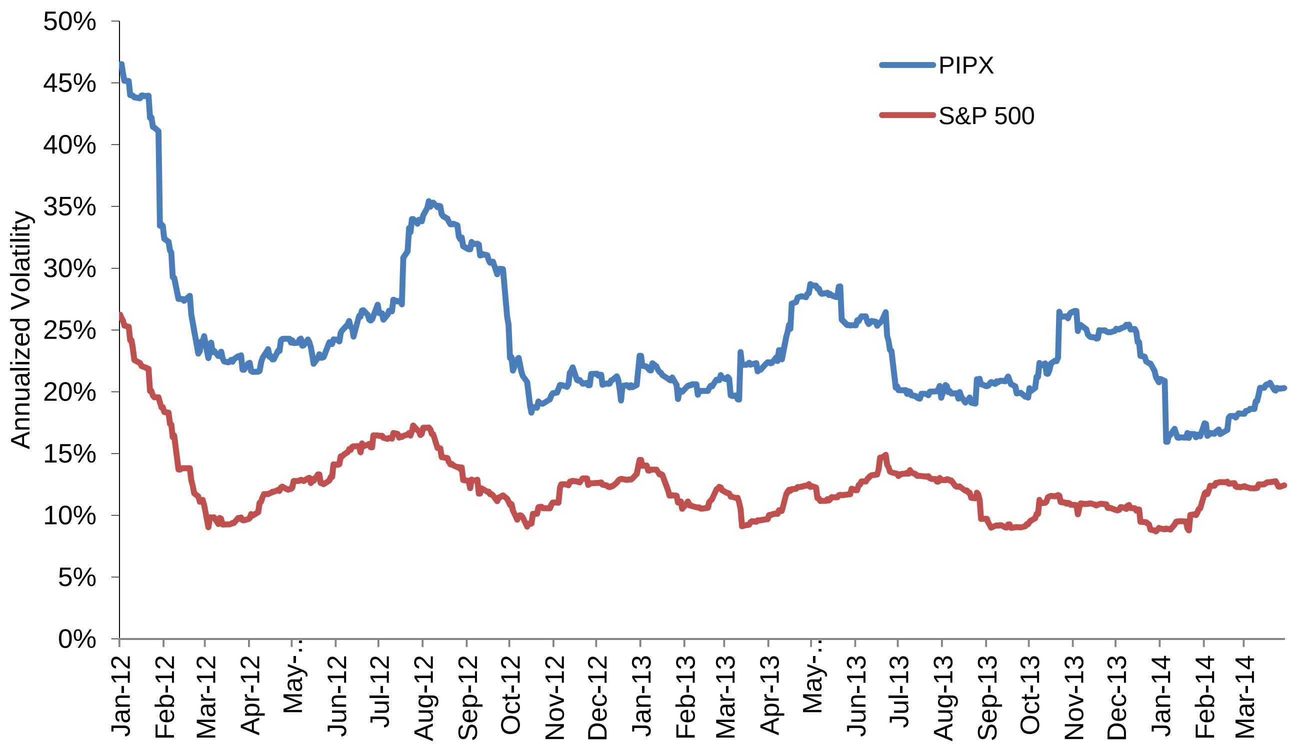

Figure 5 – Comparison of the volatility of the PIPX Index and the S&P 500

What the IPX Index may be telling us

The lower returns and higher volatility of the PIPX as compared to the broad market imply that there are challenges facing investment in intellectual property licensing as the business evolves and matures. This of course could be due to short term factors over the 30 months the IPX Index is tracked, such as a deflating patent bubble. However, it may also be a sign that there are some underlying characteristics of this business that may need to be addressed or better understood to help make intellectual property licensing a more comfortable investment for the broader market. As compared to many other public companies, revenue streams can be uncertain and lumpy, individual companies may suffer high profile legal losses which can drive negative market reaction, patent assertion costs can be high and accrued well in advance of any likely return, and patent litigation can be a highly uncertain activity. All these certainly contribute to both higher volatility and at least the perception of riskier returns. As the business matures, perhaps innovative ways will be found to help manage and mitigate these issues, or alternatively investors may get more comfortable with the model as companies demonstrate continued success.

At the same time, the disaggregation of value chains continues, with specialists in each stage of the value chain taking over more activity in many industries. This is true in all the broader sectors intellectual property companies play in, including electronics, semiconductors, and pharma. So it is natural to assume that IP licensing as a business will grow. Perhaps the last couple of years have provided the companies that make up this sector a chance to refine and mature their business models and broaden their activities to better balance risk. It will be interesting to watch the evolution of the index over the coming years to see how this dynamic plays out.