

Q2 2015 Public PAE Report

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Introduction

Publicly traded patent assertion entities (“PAEs”) are a relatively recent phenomenon. Over the past few years, the proliferation of public PAEs has cast some light on the ways in which PAEs seek to earn revenue based on their primary factors of production—capital and patents.

Over the past four quarters alone, the public PAEs detailed in this report have raised over \$1.5 billion in the debt and equity markets while spending more than \$160 million on over 25 patent portfolios. The acquired patents, which relate to a variety of sectors, will likely be enforced by the PAEs.

Even with all of this activity, the public PAE industry is still considered too niche to have widespread, comprehensive coverage by sell-side equity analysts who independently research and analyze companies to generate investment recommendations. The dearth of insight into these companies has enabled a contingent of speculators and day traders who opine—often incorrectly—on what legal developments will mean for the prospects of future settlements or revenue for these companies.

In addition to the lack of sell-side coverage of PAEs, the art of analyzing public equity markets and SEC filings is generally not a core strength of many IP professionals, putting them at a disadvantage when encountering public PAEs as counterparties in patent transactions and/or as potential courtroom adversaries.

Since its inception in 2008, RPX has striven to increase transparency in the patent markets. To that end, this RPX Public PAE Report offers analysis of public PAEs and provides summary statistics for a variety of metrics relevant to the public market, including financial performance and enforcement activity. The goal of this report is to deliver comprehensive information that gives IP professionals unique perspective on public PAEs.

Key Findings

Note: Aggregate figures and counts are relative to the 23 public PAEs detailed in this report.

- Taken as an index, public PAEs have underperformed the NASDAQ over the past quarter at (2.3%) versus 2.2%, and over the last twelve months at (15.3%) versus 13.1%. Only seven public PAEs had a positive stock price performance in the second quarter of 2015. Please see charts 1, 2, and 3.
- Public PAEs tend to be small—only four public PAEs have market capitalizations greater than \$1 billion as of June 30, 2015. Please see chart 4.
- Aggregate royalty revenue for public PAEs was \$397 million in the second quarter of 2015, yet only six PAEs had royalty revenue above \$10 million. Please see charts 5 and 6.
- Despite underperforming the NASDAQ, PAEs have raised more than \$1.5 billion across 23 transactions over the past 12 months. Please see charts 10 and 11.
- Only eight public PAEs have more than \$50 million in cash and six have less than \$5 million as of June 30, 2015. Please see chart 14.
- Public PAEs are prolific acquirers of patent portfolios, with 25 disclosed purchases over the last 12 months. Please see chart 15 and 16.
- While cash is the most prevalent form of consideration in public PAE patent acquisitions, the majority of transactions include some mix of contingencies (i.e. back-end arrangements). Please see chart 19.
- Public PAEs are also prolific plaintiffs, accounting for 24 new campaigns and 169 new cases over the last 12 months, representing 480 active defendants as of June 30, 2015. Please see charts 20, 23, and 24.

Methodology

RPX continuously strives to improve the accuracy and scope of its data and may make minor changes to methodology and underlying data presented in future analyses and reports. In addition, certain aspects of RPX's methodology may result in slight changes as time passes.

Timing

- This report reflects available financial information as of August 26, 2015, which encompasses Q2 2015 reports and filings for all but one company highlighted in the report. Data are collected when the selected public PAEs report financial data, which can take two to three months after the close of a fiscal quarter or year, thus contributing to the time-gap between the availability of this report and the end of the quarter.
- For companies with off-cycle financials that do not coincide with standard quarter- and year-ends of March 31, June 30, September 30, and December 31, financial data were taken from the quarter with the closest associated end-date.

Public PAE Definition

- For purposes of this report, a public PAE is a publicly traded entity with revenue, activities, or market valuation largely related to patent assertion.

Public PAE Identification

- RPX identifies public PAEs through a manual review process performed by experienced employees with knowledge of the patent industry.

- The process includes, among other things, reviewing public filings; searching for evidence of operating or patent monetization activities on the Internet, including company websites; reviewing complaints, with a focus on accused products and allegations regarding products and/or services sold by the patent owner; considering the outside counsel employed by the entity (e.g. whether outside counsel has a history of representing public PAEs); reviewing corporate disclosure statements filed in litigation; and soliciting market intelligence from patent professionals.
- The public PAEs for this particular report represent the largest, most established public PAEs as well as several recently formed public PAEs that have become public via reverse mergers.
- While there are elements of subjectivity in this approach, RPX believes that the process is robust based on feedback from other patent professionals.

Data Set

- This report uses data from publicly available sources (public filings, press releases, company websites, etc.) and from RPX's proprietary litigation database.

Primary Market Sector

- RPX patent professionals classify portfolios into proprietary market sectors. Each portfolio offered may be classified into multiple market sectors. For purposes of this report, only the most relevant or "primary market sector" is used.

Cases Filed

- “Cases filed” refers to filed actions. A single case filed may include multiple defendants. The date for a case filed is the date on which it was originally filed.

Campaign, New Campaigns Filed, Total Campaign Defendants, and Unique Campaign Defendants

- “Campaign” refers to all cases filed by the same plaintiff (inclusive of all members in the corporate family) where each case has at least one patent or family member of a patent in common with another case in the campaign.
- “Campaigns filed” refers to unique campaigns. The date for a campaign filed is the filing date of the first case filed in the campaign. For example, if a campaign includes ten cases, there will be only one new campaign filed; the filing date for the campaign is established by the filing date of the first case filed in the campaign.

Litigation Identification

- RPX excludes false marking cases, misfiles, and ownership disputes.

PAE Related Entities

- RPX’s proprietary litigation database rolls up certain related PAEs into a single public PAE entity. RPX has manually identified these relationships by, among other things, reviewing corporate disclosures, patent assignment records, and RPX market intelligence. For example, Acacia has numerous subsidiaries that RPX has identified. These entities are all represented as Acacia in this report’s analyses.

Small Cap and Large Cap PAEs

- A small cap PAE is a public PAE with a market cap of less than \$300 million, and a large cap PAE is a public PAE with a market cap greater than or equal to \$300 million, as of the end of the reporting quarter.

Patent Transaction Identification

- This report notes patent acquisitions and patent sales that any PAE on the selected list has disclosed in public filings, press releases, or any other publicly available and credible source.

PAE Financings Classification

- Financings classified as Equity deals are deals publicly identified as Bought Deals, Follow-ons, PIPEs, Private Placements, Registered Directs, Rights Offerings, or Warrant Sale.
- Financings classified as Debt deals are deals publicly identified as Debt, Loan Facilities, or Secured Notes.
- Financings classified as Hybrid deals are deals publicly identified as Convertible Debentures, Convertible Notes, Convertible Senior Notes, or Senior Convertible Notes.

Historical Data

- For the purpose of consistency, historical PAE data are not adjusted quarter over quarter if the PAE list is modified due to various reasons (bankruptcy, acquisition, discontinuation of PAE activity, etc.). Historical data may change to reflect differences in public disclosure over time.

Market Data

The following pages feature charts and highlights relating to PAE market performance.

Public PAE Overview

Large Cap Companies	Ticker	Stock Price (As of 6/30/15)	Market Cap (\$USD M)	Q2 2015			Last 12 Months		
				High	Low	Stock Performance (% change)	High	Low	Stock Performance (% change)
InterDigital	IDCC	\$56.89	\$2,051.9	\$60.47	\$49.78	12.2%	\$60.69	\$38.64	19.0%
Tessera	TSRA	37.98	1,998.3	40.75	36.11	(6.7%)	43.71	21.38	72.0%
Rambus	RMBS	14.49	1,673.2	15.41	12.57	14.7%	15.49	9.87	1.3%
Rovi	ROVI	15.95	1,466.4	19.51	15.79	(11.5%)	26.44	15.57	(33.4%)
Acacia	ACTG	8.77	447.7	11.38	8.63	(17.9%)	19.93	8.61	(50.6%)
Pendrell	PCO	1.37	365.2	1.45	0.96	4.6%	1.91	0.95	(22.2%)
Small Cap Companies									
WiLAN	WILN	2.32	279.7	2.66	1.96	(5.6%)	3.49	1.88	(14.7%)
VirnetX	VHC	4.20	218.9	7.22	4.10	(30.1%)	18.24	3.80	(76.1%)
Unwired Planet	UPIP	0.62	69.5	0.80	0.55	8.8%	2.29	0.54	(72.2%)
SITO Mobile	SITO	3.60	55.4	3.90	2.90	24.1%	4.89	1.48	(5.3%)
Vringo	VRNG	0.56	53.3	0.75	0.55	(14.51%)	3.66	0.46	(83.8%)
Marathon Patent Group	MARA	2.90	40.6	6.06	2.85	(48.7%)	9.73	2.76	(47.7%)
Network-1	NTIP	1.71	40.1	2.35	1.71	(24.0%)	2.40	1.59	(16.2%)
ParkerVision	PRKR	0.38	36.6	0.84	0.36	(55.4%)	1.56	0.33	(74.7%)
ITUS	ITUS	4.00	35.0	5.00	2.13	0.0%	8.95	1.39	(46.7%)
Finjan Holdings	FNJN	1.38	31.1	1.94	1.23	(28.9%)	4.53	1.16	(67.5%)
Walker Innovation	WLKR	1.44	29.9	2.20	1.20	2.9%	3.03	1.20	(52.8%)
Crossroads Systems	CRDS	1.53	29.7	2.60	1.51	(40.9%)	3.40	1.45	(54.3%)
Spherix	SPEX	0.48	13.7	0.82	0.48	(40.9%)	1.89	0.44	(73.2%)
Document Security Systems	DSS	0.27	12.3	0.42	0.22	(36.1%)	1.49	0.21	(80.7%)
Inventergy	INVT	0.33	11.9	0.47	0.27	(26.4%)	2.78	0.25	(88.2%)
Revolutionary Concepts	REVO	0.00	3.01	0.01	0.00	245.5%	0.01	0.00	(42.4%)
Endeavor IP	ENIP	0.00	0.2	0.00	0.00	(44.4%)	0.05	0.00	(98.0%)

Note: Last 12 months data through end of Q2 2015.

Public PAEs Have Underperformed the Market

Chart 1: Q2 2015 Index Chart

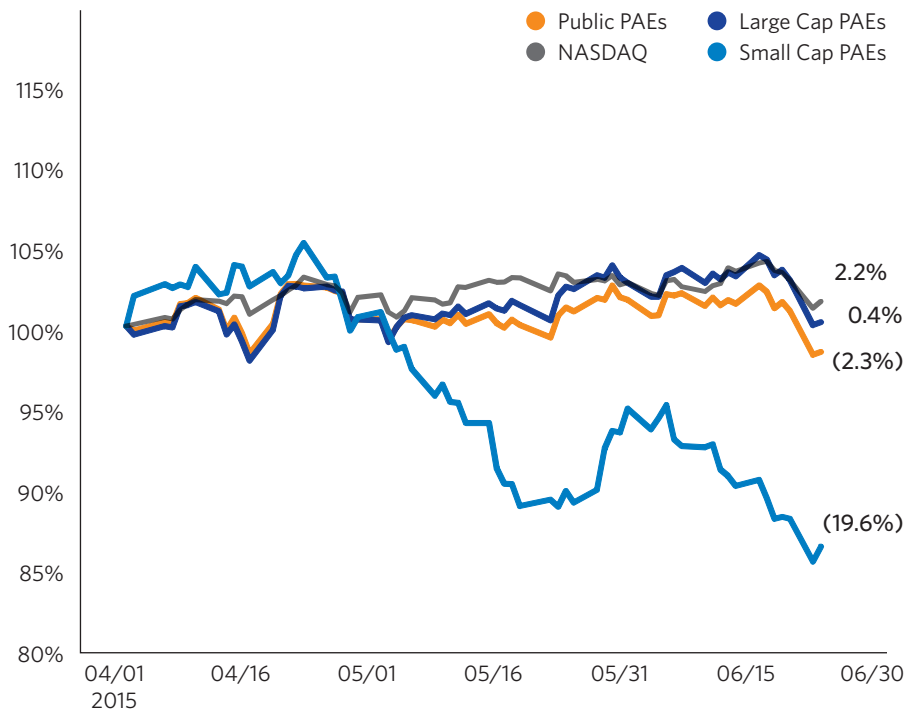
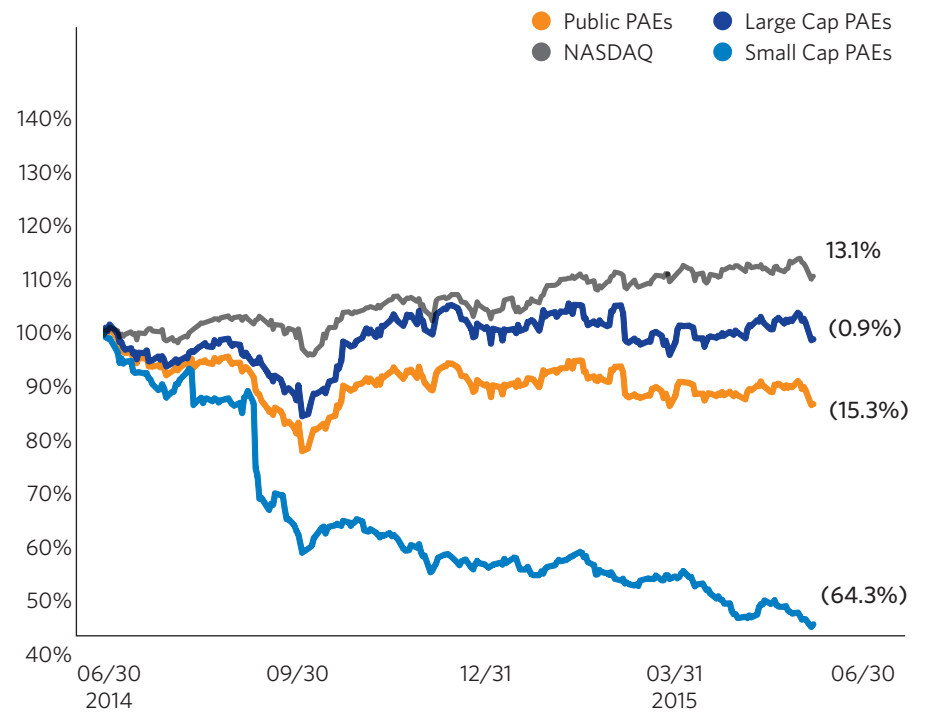


Chart 2: Last 12 Months Index Chart as of 6/30/2015



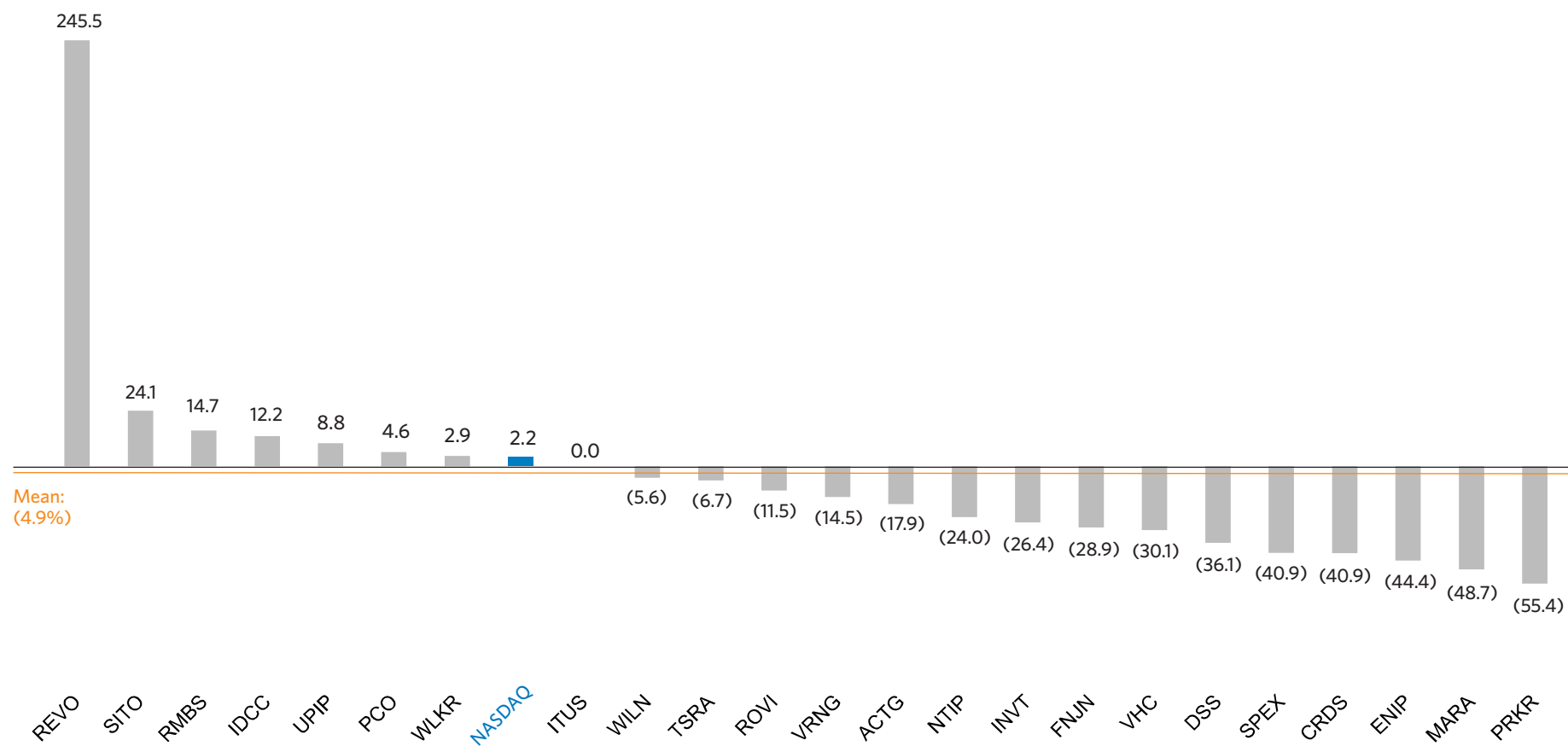
Methodology Note:

The "Public PAEs", "Large Cap PAEs", and "Small Cap PAEs" indices are market cap weighted—each stock is weighted based on its market capitalization, with larger companies carrying a larger percentage weighting of the index.

Q2 2015 Stock Performance Has Been Sluggish Overall

Chart 3: Q2 2015 Stock Performance Percentage

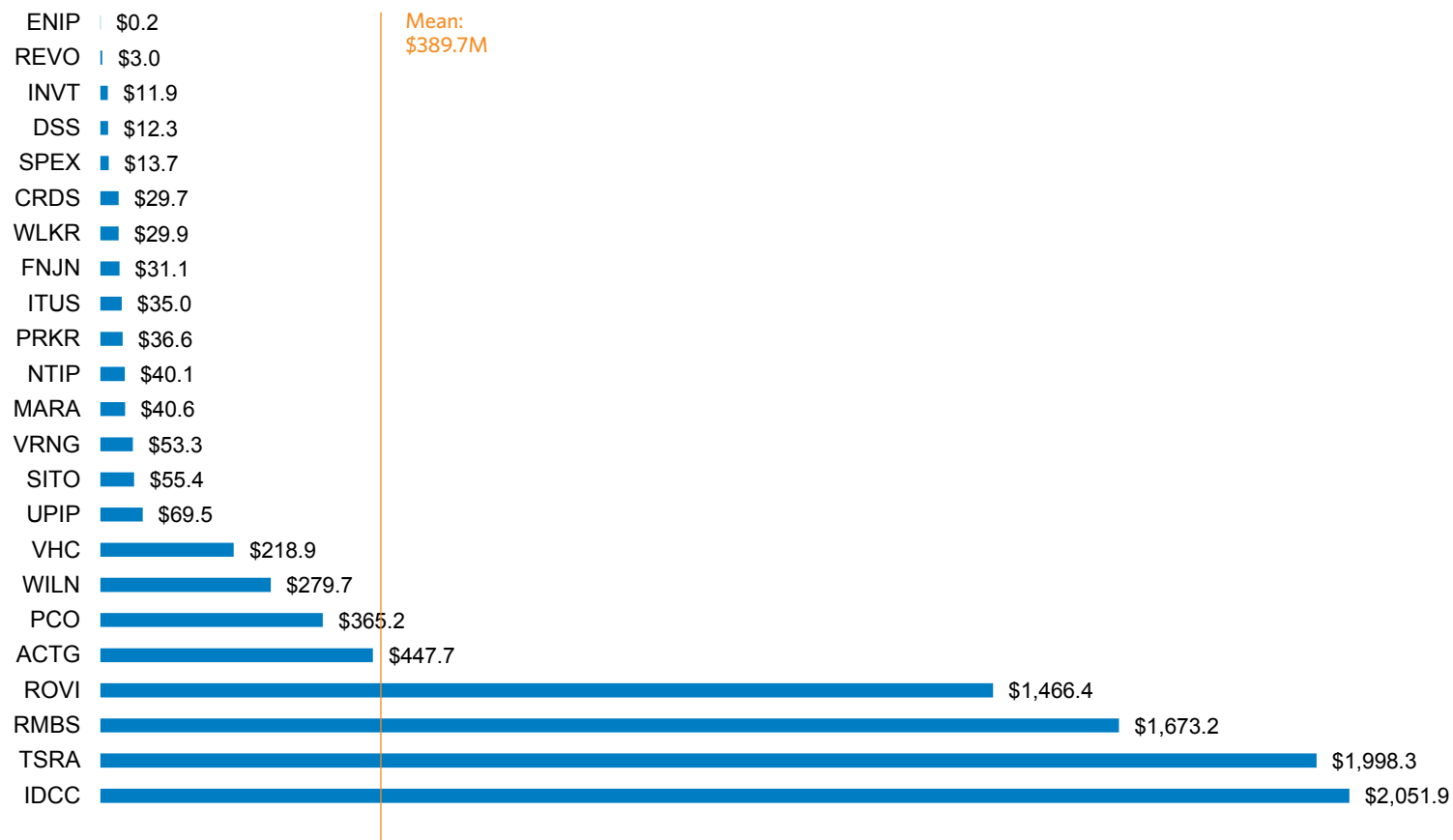
With the exception of a few companies, public PAEs underperformed the market in Q2 2015.



Public PAE Market Cap Summary as of Q2 2015

Chart 4: Public PAE Market Cap (\$USD M)

There are only four public PAEs with a market cap over \$1 billion, with the majority of public PAEs under a market cap of \$100 million.



Financial Data

The following pages feature charts and highlights relating to key financial data for public PAEs.

Royalty Revenue Is Hovering Around Two-year Average

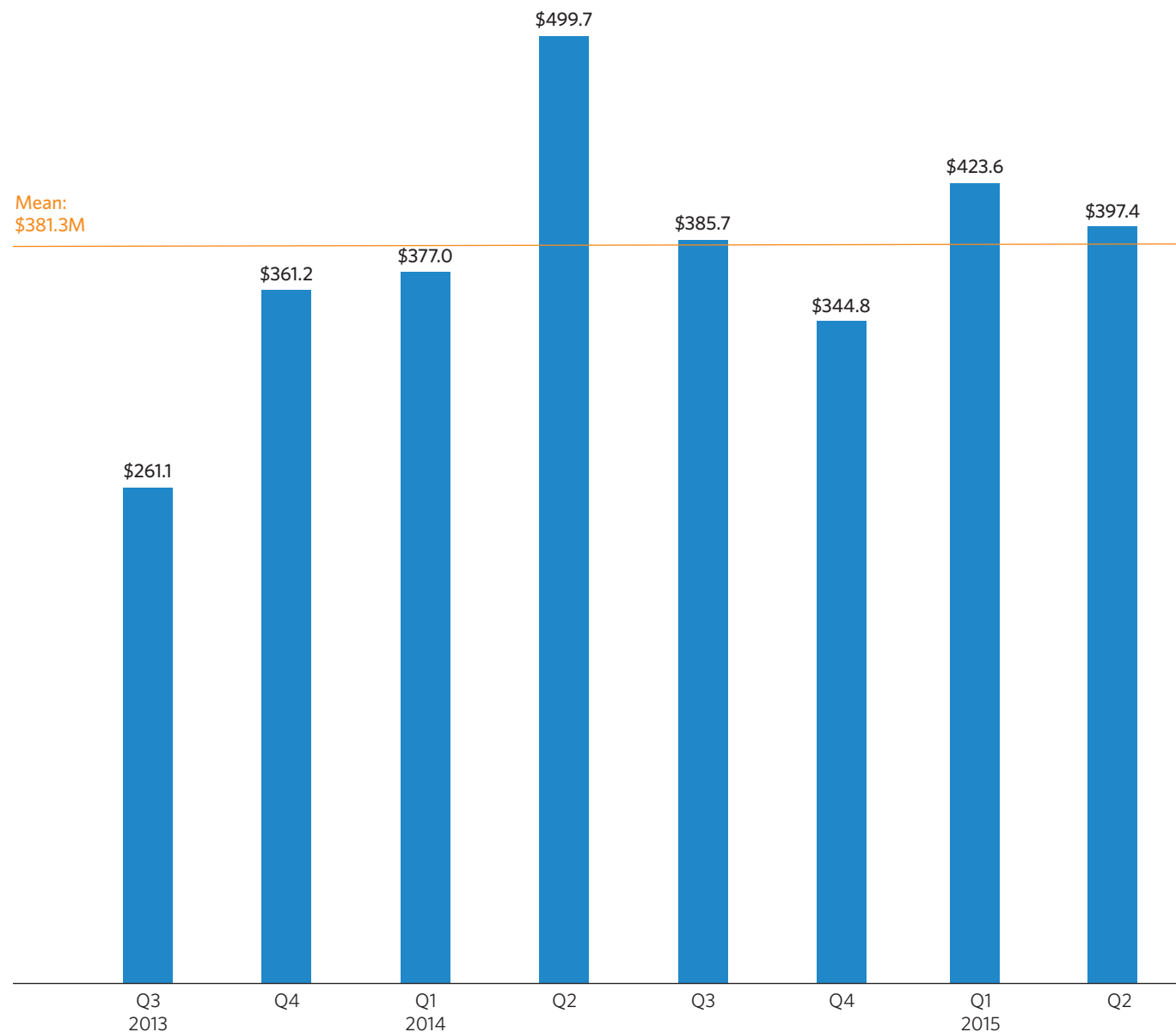
Chart 5: Total Royalty Revenue (\$USD M)

Royalty revenue has been inconsistent since Q3 2013.

Methodology Note:

Revenue is considered "royalty revenue":

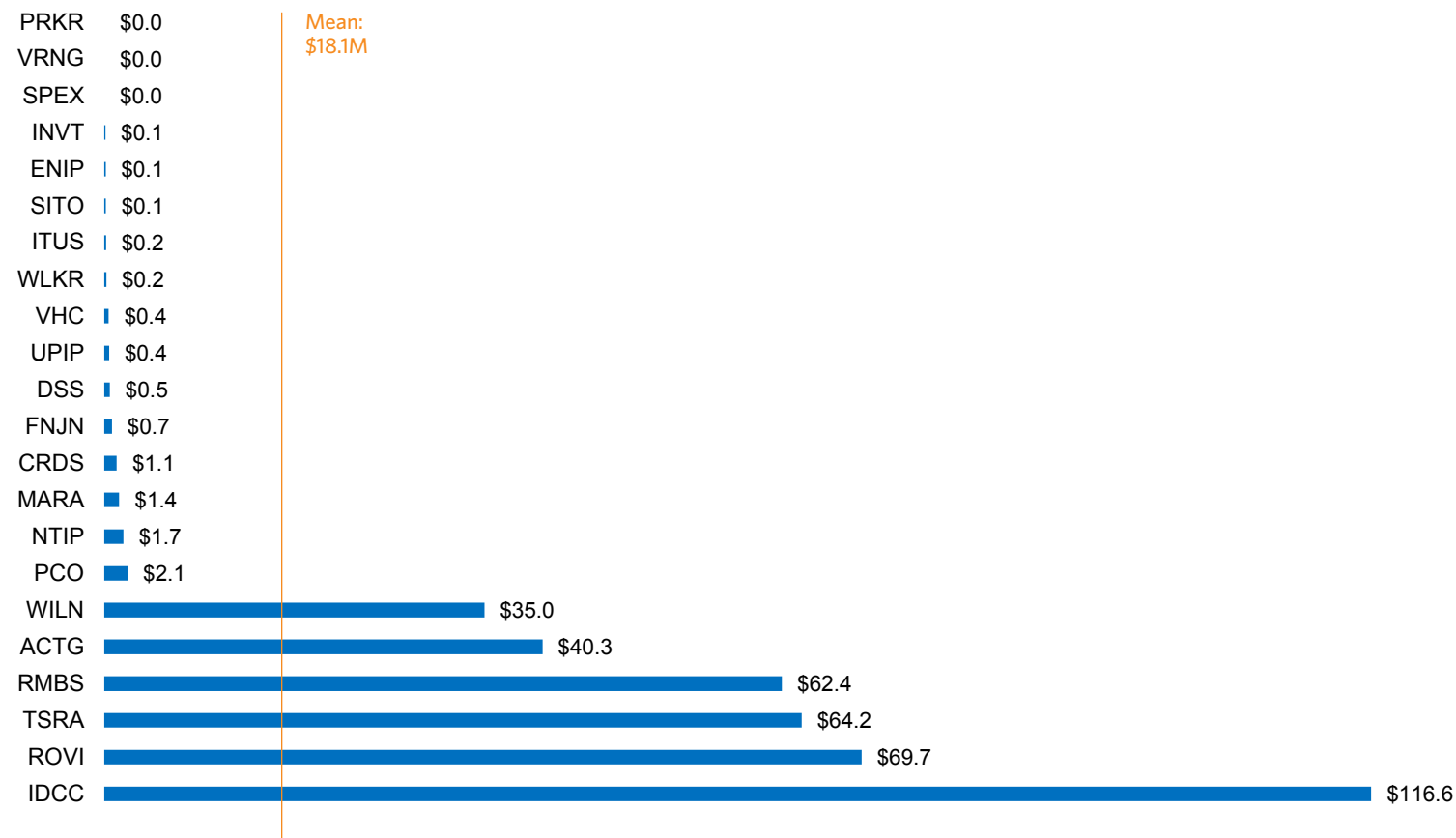
- If it is specifically classified or broken out as royalty or licensing revenue
- If the public PAE's only source of revenue is from licensing its patents



Royalty Revenue Was Largely Driven by a Small Number of PAEs in Q2 2015

Chart 6: Total Q2 2015 Royalty Revenue (\$USD M)

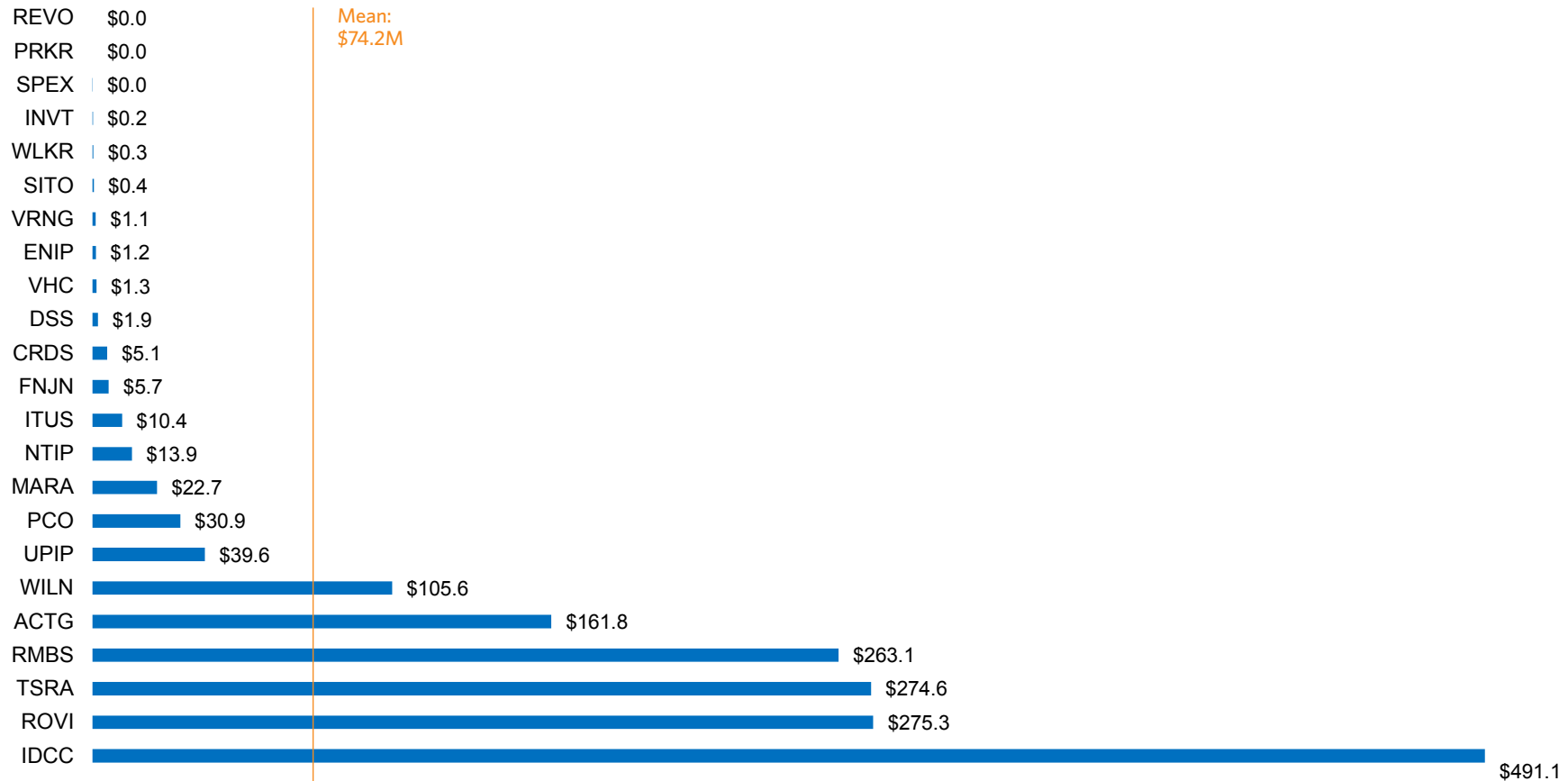
Six public PAEs accounted for 97% of total royalty revenue of all selected public PAEs for Q2 2015.



...and over the Last 12 Months

Chart 7: Last 12 Months Royalty Revenue (\$USD M)

Four public PAEs accounted for 76% of total royalty revenue of all selected public PAEs for the last 12 months as of Q2 2015. Most have revenue under \$100 million.



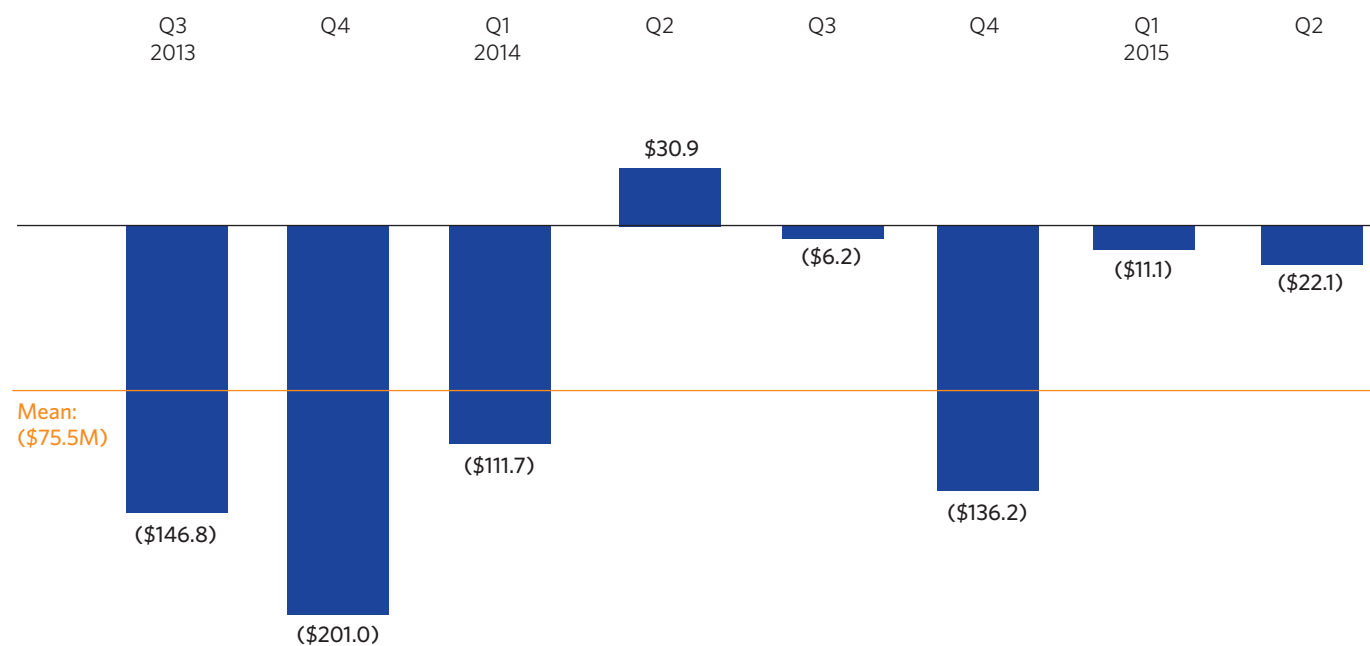
Pattern of Net Losses for Public PAEs

**Chart 8: Total Net Income/
Loss per Quarter (\$USD M)**

Public PAEs have consistently experienced net losses over the past two years, with the exception of Q2 2014.

Methodology Note:

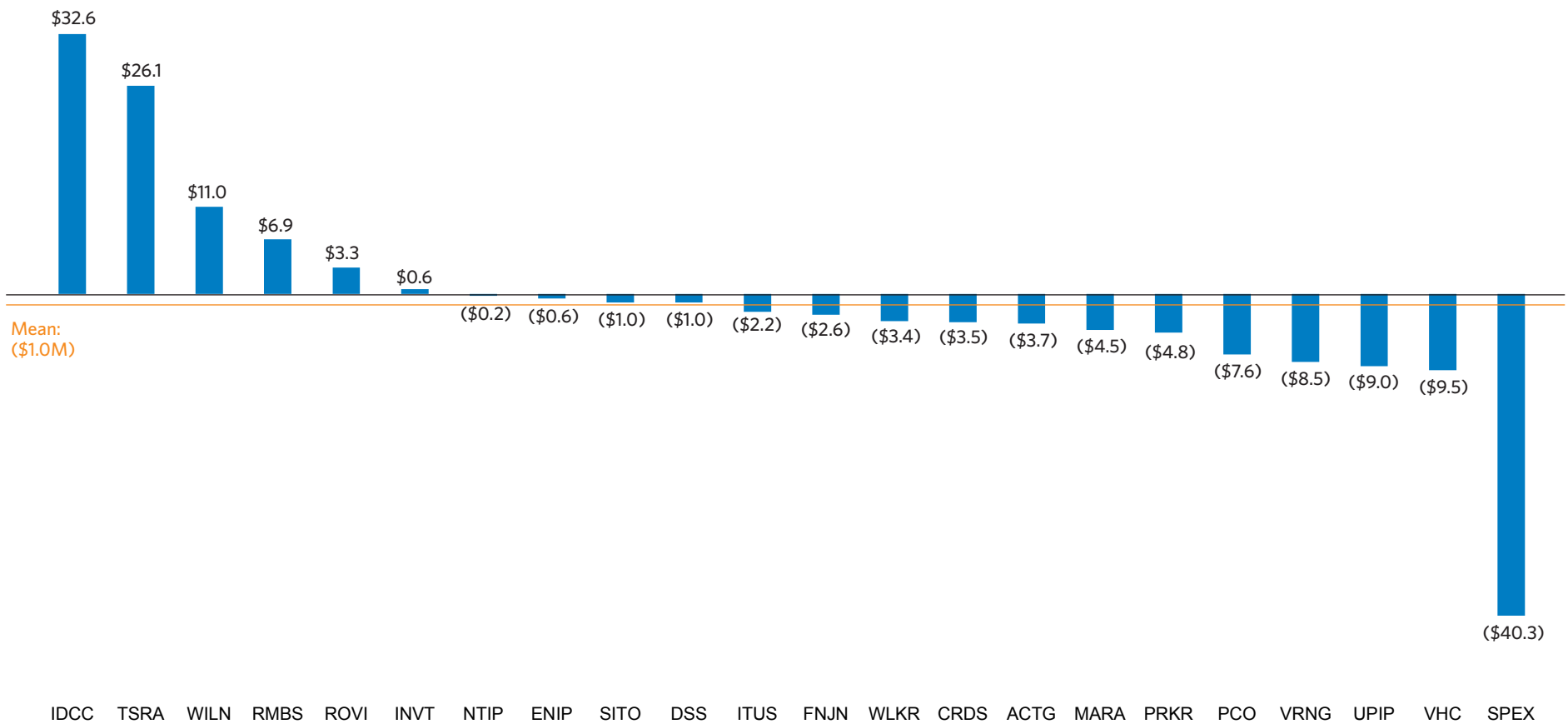
Net income/loss reflects the operations of the whole company and not specifically the operations related to patent assertion, as most public PAEs do not publicly disclose segmented profit/loss information for their patent assertion businesses.



Net Losses Common Across Most Public PAEs

Chart 9: Total Q2 2015 Net Income/Loss (\$USD M)

Only six public PAEs generated positive net income in Q2 2015.



Detailed List of Public PAE Financings— Last 12 Months as of Q2 2015

During the last twelve months as of Q2 2015, there were seven equity deals totaling \$35 million, six debt deals of \$869 million, and ten hybrid deals totaling \$679 million, with a total amount raised of \$1,583 million.

Close Date	Issuer	Type	Amount Raised (\$USD M)
05/04/15	Vringo	Hybrid	\$12.5
04/20/15	Revolutionary Concepts	Equity	\$17.5
04/06/15	Endeavor IP	Hybrid	\$0.0
04/01/15	Inventergy	Equity	\$2.2
03/11/15	InterDigital	Hybrid	\$316.0
03/04/15	Rovi	Hybrid	\$345.0
02/27/15	Inventergy	Debt	\$1.2
01/29/15	Marathon Patent Group	Debt	\$15.0
01/27/15	Crossroads Systems	Equity	\$7.1
01/16/15	ParkerVision	Equity	\$1.3
01/16/15	Endeavor IP	Hybrid	\$0.1
12/23/14	Document Security Systems	Equity	\$1.7

Close Date	Issuer	Type	Amount Raised (\$USD M)
12/23/14	ParkerVision	Debt	\$7.0
10/16/14	Marathon Patent Group	Hybrid	\$5.5
10/03/14	SITO	Debt	\$10.0
10/03/14	SITO	Equity	\$1.0
10/01/14	Inventergy	Debt	\$11.0
09/30/14	Revolutionary Concepts	Hybrid	\$0.0
07/31/14	Revolutionary Concepts	Hybrid	\$0.0
07/16/14	Endeavor IP	Hybrid	\$0.3
07/15/14	ITUS	Equity	\$4.0
07/09/14	Endeavor IP	Hybrid	\$0.0
07/02/14	Rovi	Debt	\$825.0

Equity Financings Have Been Common Among PAEs

Chart 10: Total Amount Raised by Type (\$USD M)

Financings raise an average of \$212 million per quarter.

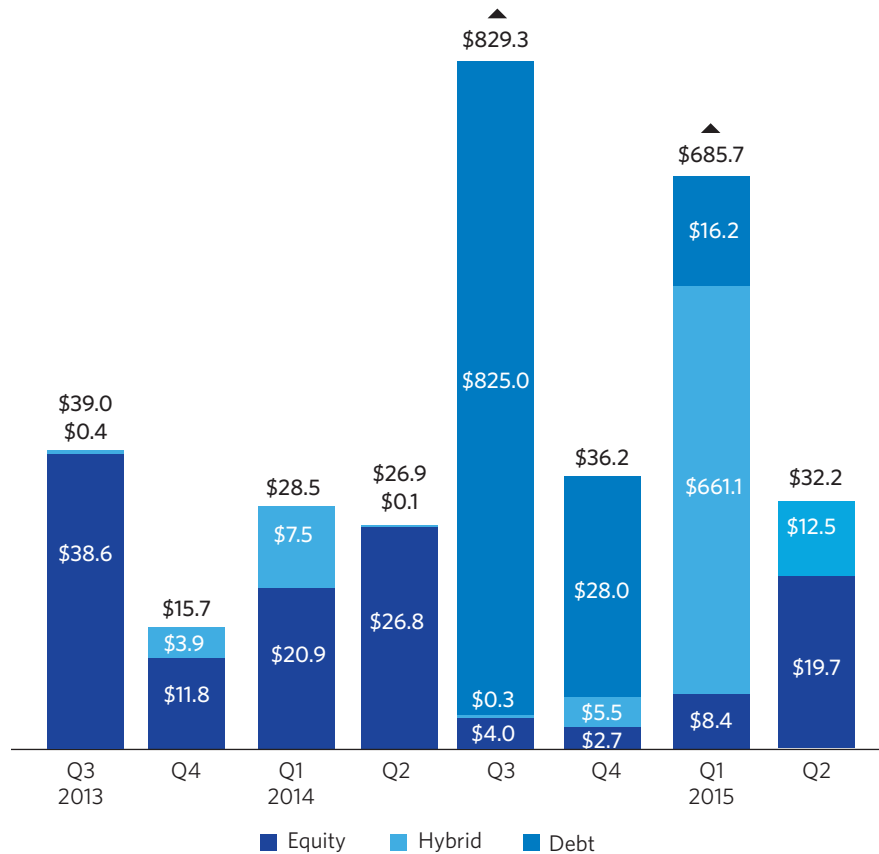
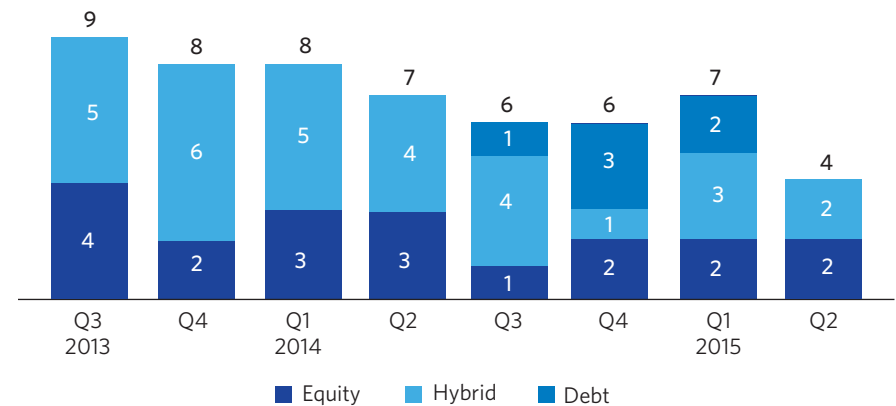


Chart 11: Number of Financings by Type

On average, public PAEs have executed seven financings (typically hybrid transactions) per quarter. Q2 2015 featured the lowest number in the last eight quarters.



Public PAE Cash Declining

Chart 12: Total Public PAE Cash Balance per Quarter (\$USD M)

Since Q3 2013, public PAEs have had an average of \$2.7 billion in cash per quarter.

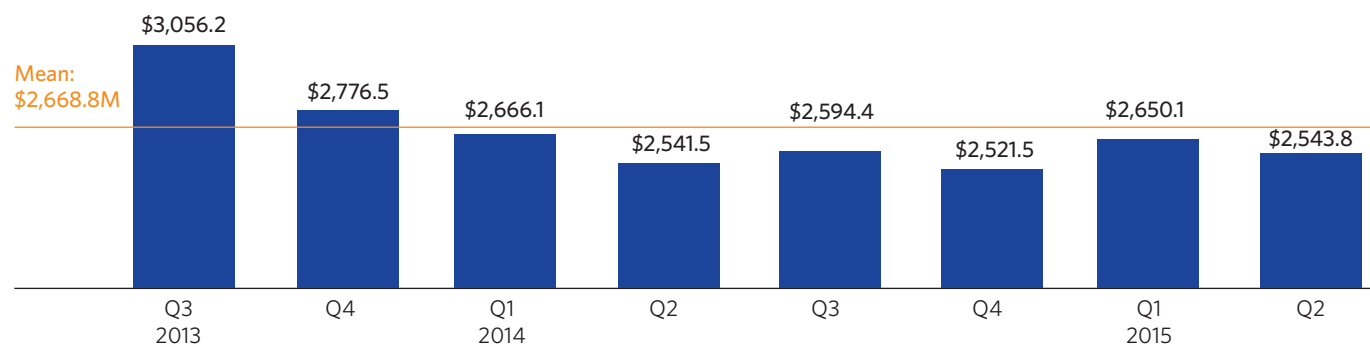
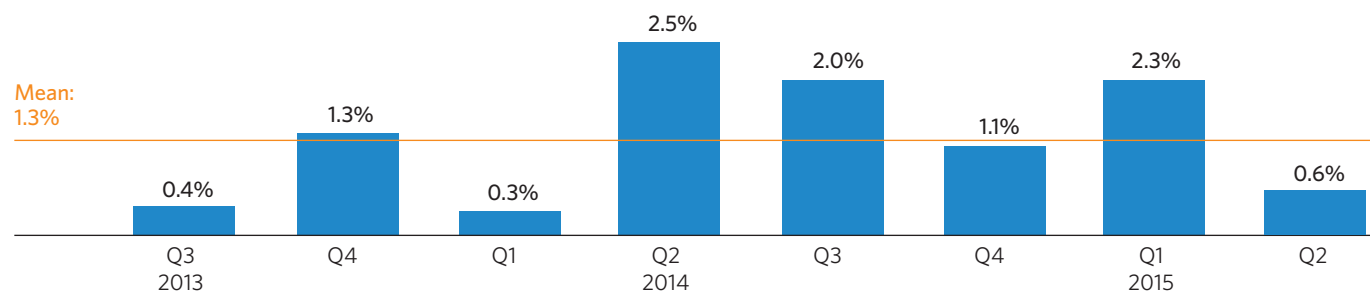


Chart 13: Cash Spent to Acquire Patents as a Percentage of Total Public PAE Cash Balance

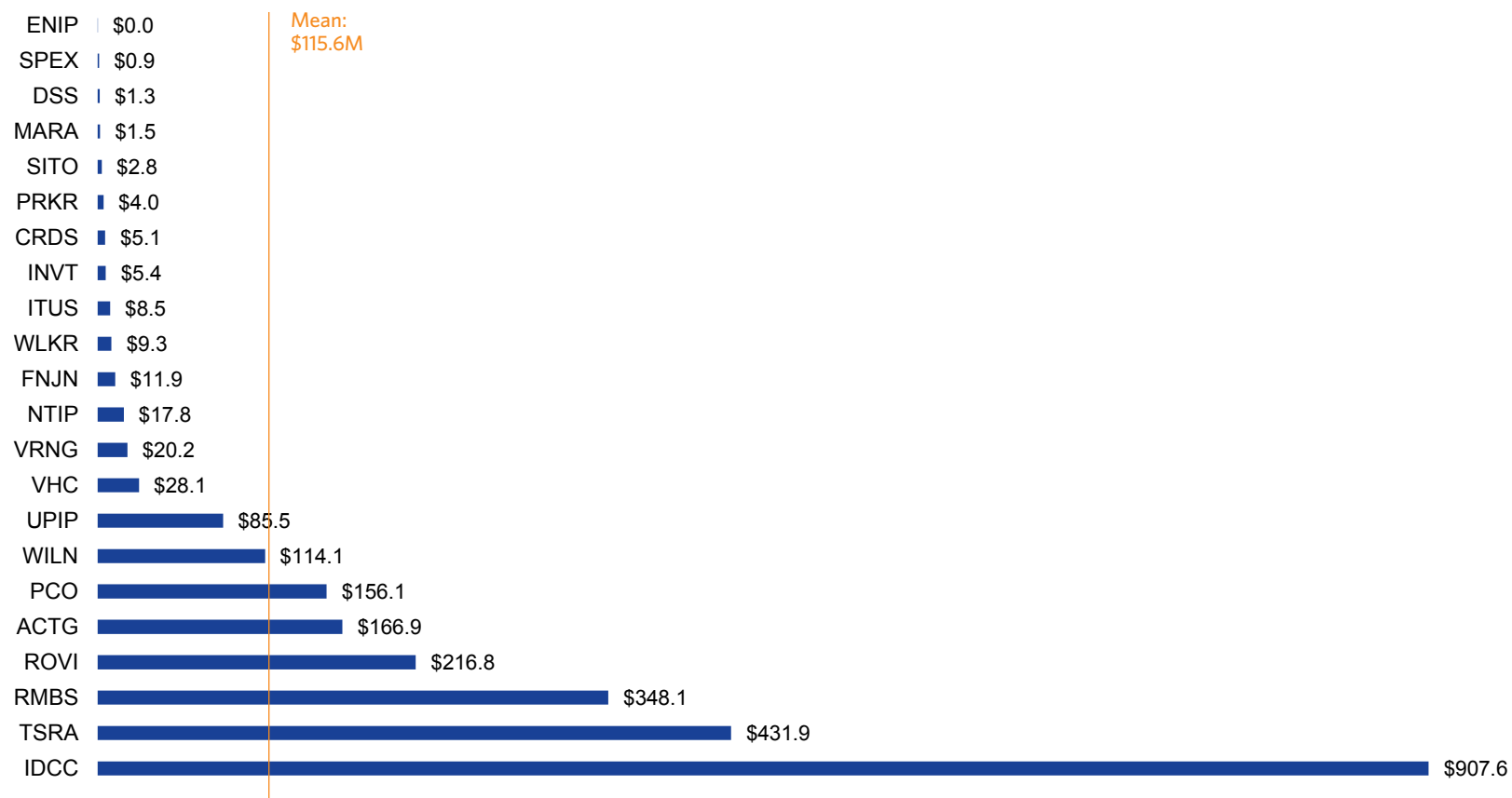
Cash spent on patents has been erratic quarter over quarter, with a high of 2.5% in Q2 2014.



Cash Is Mostly Concentrated Among a Few Public PAEs

Chart 14: Total Q2 2015 Cash Balance (\$USD M)

The top four public PAEs accounted for 75% of the total cash balance of all selected public PAEs in Q2 2015.



Patent Transactions

The following pages feature charts and highlights relating to public PAE patent acquisitions and sales.

Disclosed Patent Transactions— Last 12 Months as of Q2 2015

Patent Transaction Identification

This report notes patent acquisitions and patent sales that any PAE on the selected list has disclosed in public filings, press releases, or any other publicly available and credible source.

Date of Transaction	Acquirer	Seller	Portfolio	Purchase Price (\$USD M)	Number of Assets
06/25/2015	Not disclosed	INVT	Mobile communications infrastructure and mobile handset market	\$4.0	2 patent families
06/10/2015	WILN	Funai	Microphone technologies	Not disclosed	Not disclosed
06/02/2015	WILN	Infineon	DRAMs, FLASH memories, semiconductor processes, semiconductor manufacturing, lithography, packaging, semiconductor circuitry, and memory interfaces	\$33.0	Over 7,000 patents and applications
05/28/2015	WILN	Not disclosed	Automation of industrial facilities, including manufacturing plants and refineries	Not disclosed	Not disclosed
05/21/2015	WILN	Not disclosed	Technology that transfers communications between WiFi and cellular wireless networks	Not disclosed	Not disclosed
04/23/2015	MARA	Bridgestone Americas Tire Operations	Tire pressure monitoring sensors and systems	\$10.0	43 patents
04/09/2015	WILN	Not disclosed	Microscopy-related intellectual property for producing enhanced images	Not disclosed	Not disclosed
04/07/2015	FNJN	F-Secure	Cybersecurity	\$0.00	2 patents
03/31/2015	SITO	Not disclosed	Mobile communications/advertising offerings	\$0.2	Not disclosed
02/01/2015	PCO	Not disclosed	Not disclosed	\$2.0	Not disclosed
01/07/2015	WILN	ROHM	Power management in semiconductor devices and systems	Not disclosed	Not disclosed
12/29/2014	AUO	ITUS	ePaper electrophoretic display	\$7.0	10 US patents and 1 application
12/15/2014	WILN	Not disclosed	Power inverter technology	Not disclosed	Not disclosed
12/01/2014	ACTG	Nokia Networks	2G/3G/LTE and LTE-Advanced technologies	Not disclosed	Not disclosed
11/13/2014	WILN	Not disclosed	LED lighting	Not disclosed	Not disclosed
11/06/2014	WILN	HP	Lighting and building systems technologies	Not disclosed	Not disclosed
11/05/2014	WILN	Not disclosed	Touch keypads used in consumer electronic devices	Not disclosed	Not disclosed

Date of Transaction	Acquirer	Seller	Portfolio	Purchase Price (\$USD M)	Number of Assets
10/29/2014	WILN	ROHM	Semiconductor packaging	Not disclosed	Not disclosed
10/20/2014	WILN	Panasonic	Vending machine systems	Not disclosed	Not disclosed
10/13/2014	MARA	MedTech Development	Kyphoplasty, intervertebral inserts, and heart valve technology	\$15.5	Not disclosed
09/19/2014	MARA	TLI Communications	Telecommunications	\$1.2	1 patent
09/16/2014	WILN	Not disclosed	Technology used in smart meters that are deployed in the energy market	Not disclosed	Not disclosed
08/29/2014	MARA	Clouding IP, LLC	Network and data management technology	\$15.8	Not disclosed
08/14/2014	WILN	Hospital Special Surgery	Orthopedic technologies	Not disclosed	30 patents and applications
07/08/2014	WILN	Not disclosed	Non-volatile memory	Not disclosed	Not disclosed
07/07/2014	ROVI	Not disclosed	Guidance, search and recommendation, DVR, video-on-demand, and second screen functionality	\$28.0	500 patents and applications
07/07/2014	WILN	Nokia Networks	Current and future wireless handset and infrastructure technologies	Not disclosed	Not disclosed

Public PAEs Have Been Active in Acquiring Patents

Chart 15: Number of Disclosed Patent Acquisitions by Sector

With the exception of the Consumer Electronics and PCs sector, patent acquisitions have been spread out relatively evenly between the other named sectors, with an average of eight total transactions per quarter. Also, since Q2 2014, there has been a falloff in E-commerce and Software patent acquisitions following the Supreme Court's *Alice* ruling.

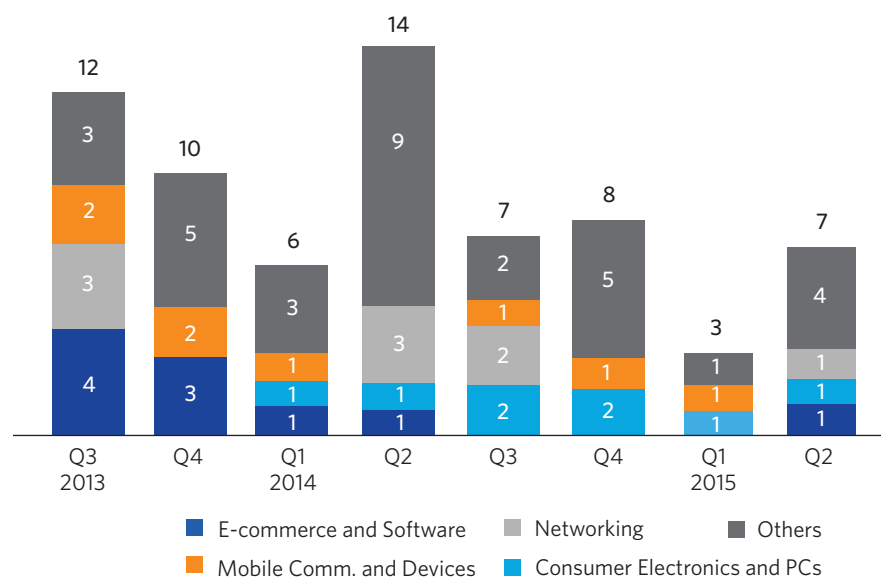
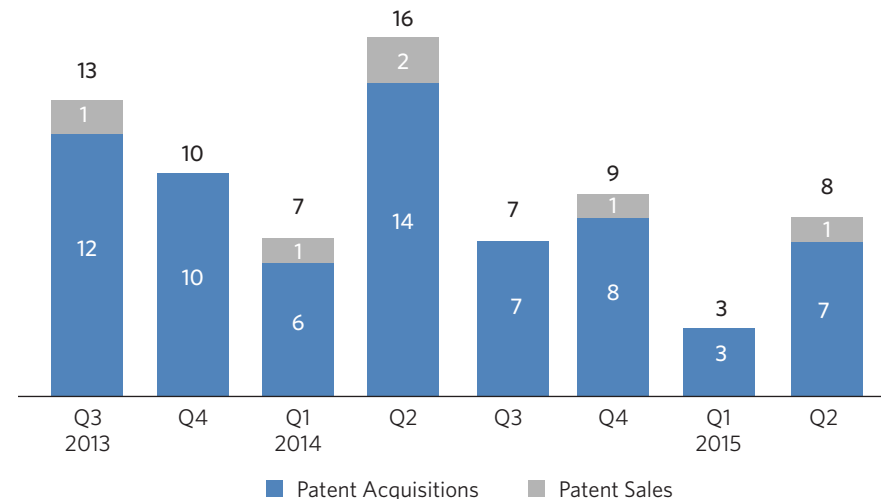


Chart 16: Number of Patent Transactions by Type

Public PAEs generally buy patents rather than sell them, with an average of nine total transactions per quarter.



Most Deals Funded by Cash

Chart 17: Capital Spent on Patents by Type—Total \$ Amount (\$USD M)

Public PAEs typically use cash to finance patent transactions, with DSS and Spherix accounting for the stock spent on patents in Q3 2013 and Q4 2013, respectively. Since Q3 2013, public PAEs have spent an average of \$47 million per quarter on patents.

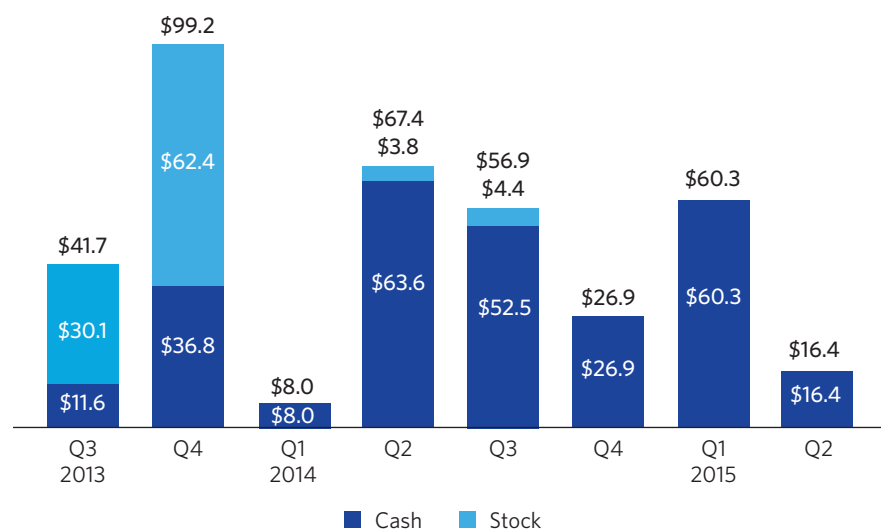
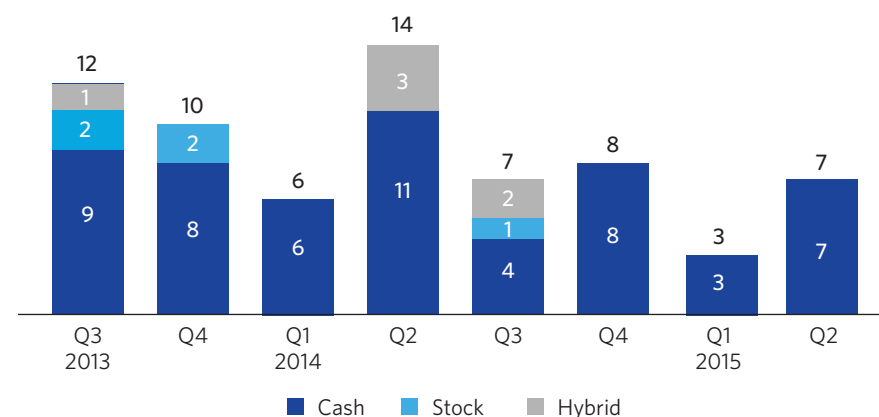


Chart 18: Capital Spent on Patents by Type—Total Count

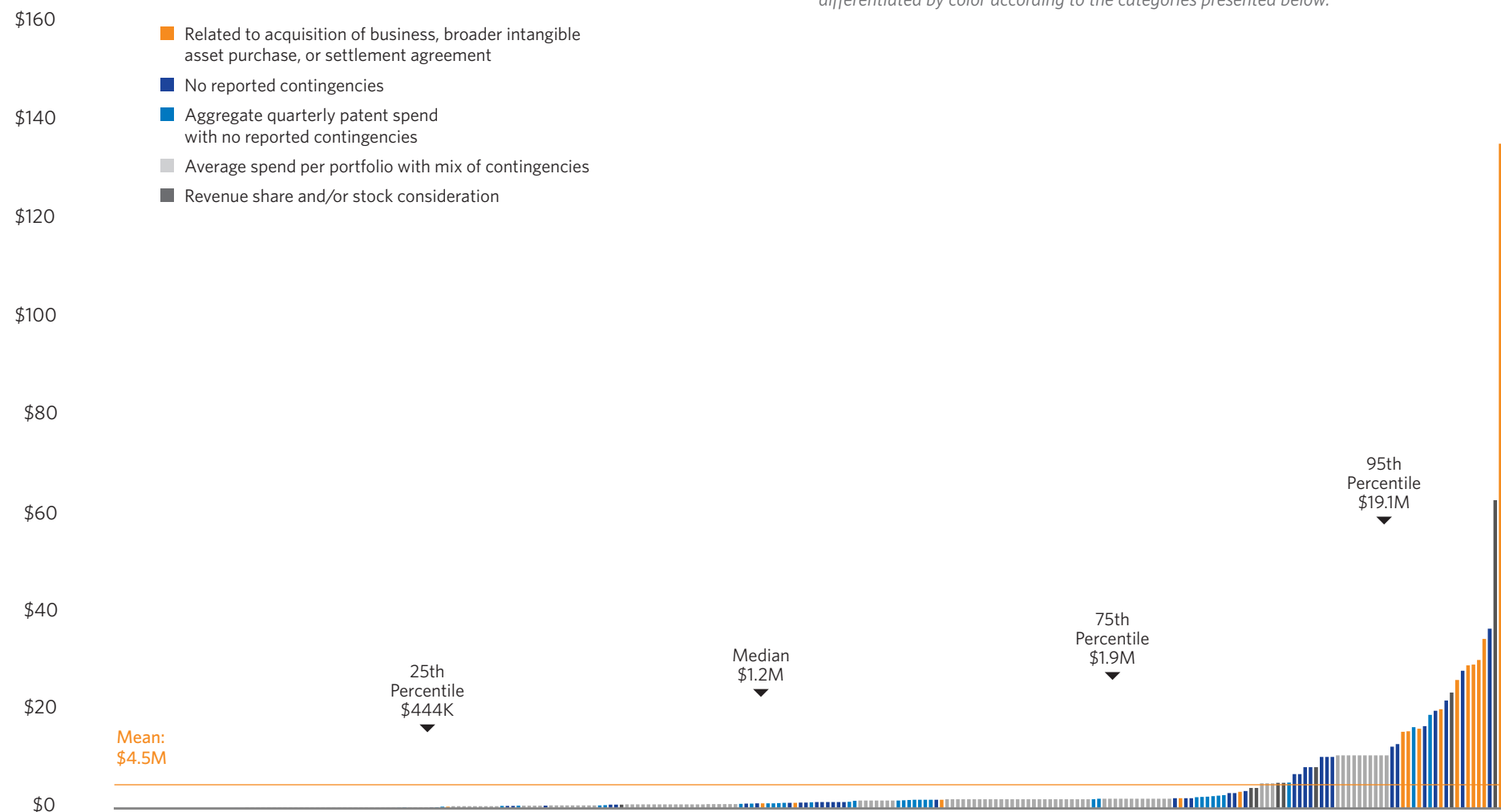
The majority of patent acquisitions have been funded with cash, with an average of eight total patent acquisitions per quarter.



Guaranteed Purchase Prices of Public PAE Portfolio Acquisitions

Chart 19: Guaranteed Purchase Prices of Public PAE Portfolio Acquisitions (\$USD M)

Though there have been sizeable purchase prices for patent portfolios, the majority of recent purchase prices have been modest, hovering around \$1 million.



Methodology Note:

This chart displays all portfolio acquisitions, dating back to 2010, for the 23 public PAEs included in this report. For some transactions, the price was publicly disclosed and is identified here. For transactions where the price was not publicly disclosed, RPX took one quarter's acquisition spend and deemed it a single transaction. Finally, the transactions are differentiated by color according to the categories presented below.

Litigation Data

The following pages feature charts and highlights relating to public PAE litigation data.

New Public PAE Campaigns in Q2 2015

Public PAE	Campaign Name	Campaign Summary	Defendant(s) Named in Q1 2015	Number of Patents
Acacia	Cellular Communications Equipment LLC	Cellular Communications Equipment initiated this campaign in April 2015, with four separate cases filed against a group of 11 mobile device makers and wireless carriers. Each of the six patents-in-suit originated with either Nokia or Siemens. The accused products include smart phones, tablets, LTE networks, and LTE network equipment. As of the date of this report, all four cases in this campaign are open in initial pleadings in the E.D. Tex.	Alcatel-Lucent, Apple, AT&T, Ericsson, HTC, LG Electronics, Samsung, Sprint (Boost Mobile), T-Mobile, Verizon, and ZTE	6
Acacia	Super Interconnect Technologies LLC	To date, Super Interconnect's campaign involves only one suit. The May 2015 complaint accused Samsung's mobile devices of infringing three patents that originated with Silicon Image. As of August 2015, the case remains open in initial pleadings in the E.D. Tex.	Samsung	3
WiLAN	Intuitive Building Controls Inc.	Intuitive Building launched this campaign in April 2015, with five cases asserting a group of lighting control patents that originated with HP. In June 2015, Creston filed petitions for IPR of two of the patents-in-suit, which are pending as of the date of this report. Intuitive dismissed its claims against Acuity Brands, with prejudice, in June 2015. The remaining district court cases remain active in initial pleadings in the E.D. Tex. as of August 2015.	Acuity Brands, Control4, Crestron, Harman International Industries, and United Technologies	3
WiLAN	Automation Middleware Solutions, Inc.	This campaign began in May 2015 and involves four patents developed by ROY-G-BIV Corporation. According to the complaints, the asserted patents have been challenged in five IPR proceedings, and in each review, the PTAB confirmed the patentability of all the challenged claims without amendment. The defendants' control systems and related devices, applications, and software, are at issue in the suits. All four cases in the campaign are open in initial pleadings in E.D. Tex. as of the date of this report.	Emerson Electric, Fisher-Rosemount Systems, Invensys, Rockwell Automation, Schneider Electric, and Yokogawa Electric	3
WiLAN	Advanced Microscopy Inc.	Advanced Microscopy kicked off this campaign in June 2015, with four suits asserting a single patent related to a microscopy system. The accused products include automated microscopes with image capture functionality as well as related software. As of August 2015, the cases are open in scheduling in the D. Del.	Carl Zeiss, Leica, Nikon, and Olympus	1

New Public PAE Campaigns Relatively Stable over Time

Chart 20: Total New Campaigns per Quarter

Since Q3 2013, there has been an average of eight new campaigns every quarter.

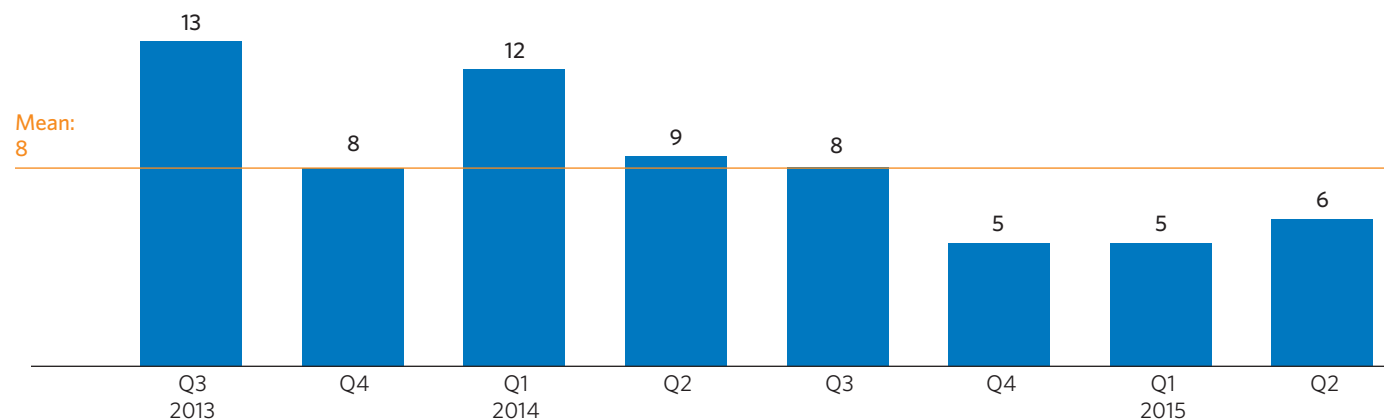
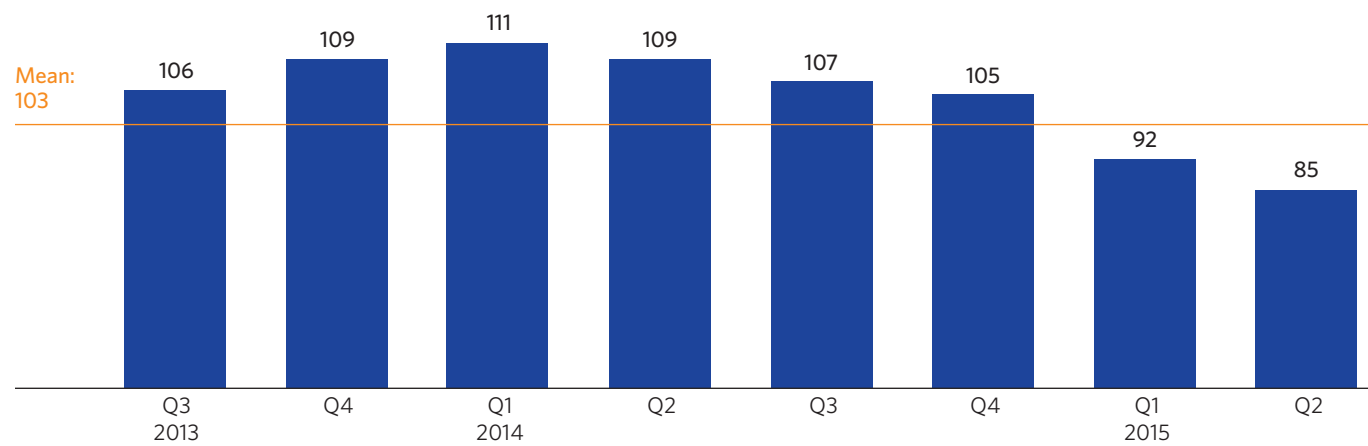


Chart 21: Total Active Campaigns per Quarter

The number of active campaigns has been trending down in recent quarters.



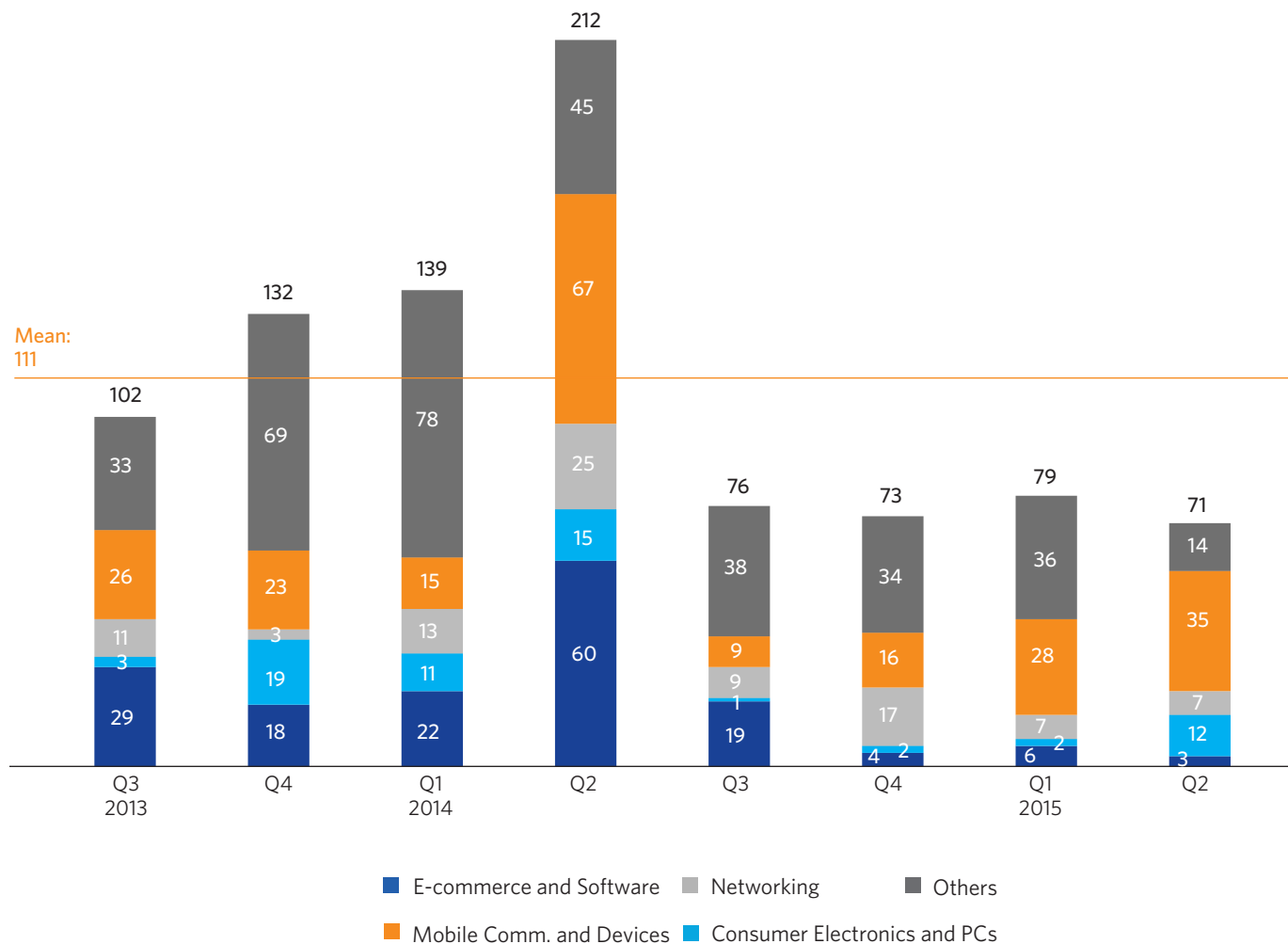
Public PAE Defendants Added at Two-year Low

Chart 22: Total Public PAE Defendants Added per Quarter

The number of total public PAE defendants added has been inconsistent quarter over quarter, with a high of 212 in Q2 2014. Recent quarters have been well below the historical mean.

Total Public PAE Defendants Added per Quarter by Sector

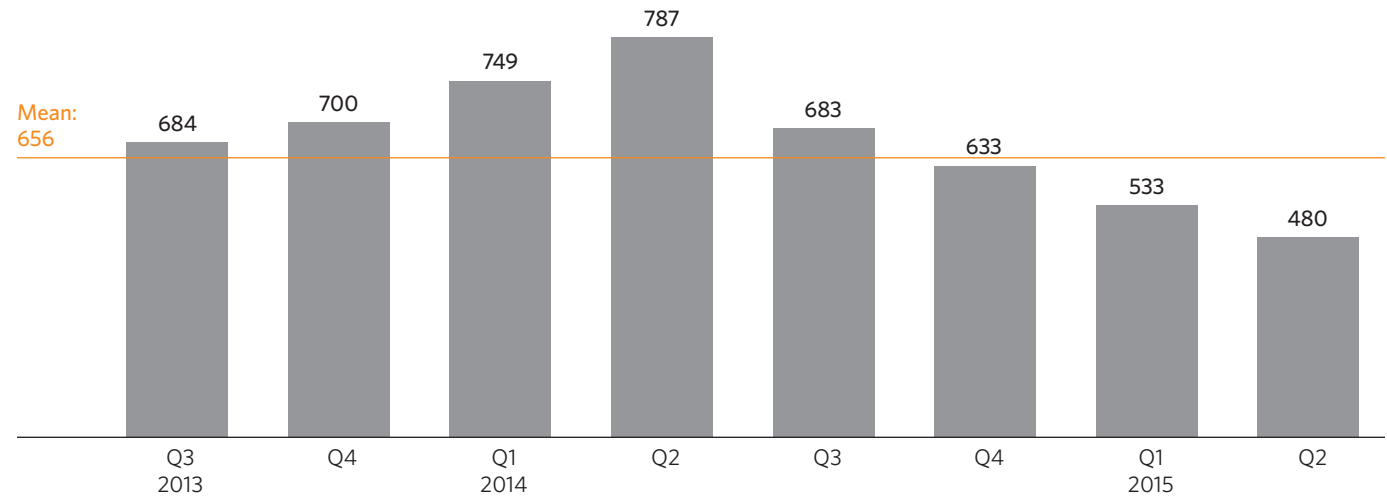
The Mobile Communications and Devices and the E-commerce and Software sectors have seen the most public PAE litigation activity. However, there has been a drop-off in the E-commerce and Software sector since Q2 2014, partly due to the Supreme Court *Alice* ruling on June 19, 2014.



Number of Active Defendants in Public PAE Litigation Has Been Decreasing

Chart 23: Total Active Defendants per Quarter

The average number of active defendants in public PAE litigation, per quarter and since Q3 2013, is 656. Recent quarters have seen slight declines.



Fewer Active Public PAE Cases in Q2 2015

Chart 24: Public PAE Cases Filed per Quarter

Public PAE cases filed per quarter is sporadic, with a high of 158 in Q2 2014 and a low of 32 in Q4 2014.

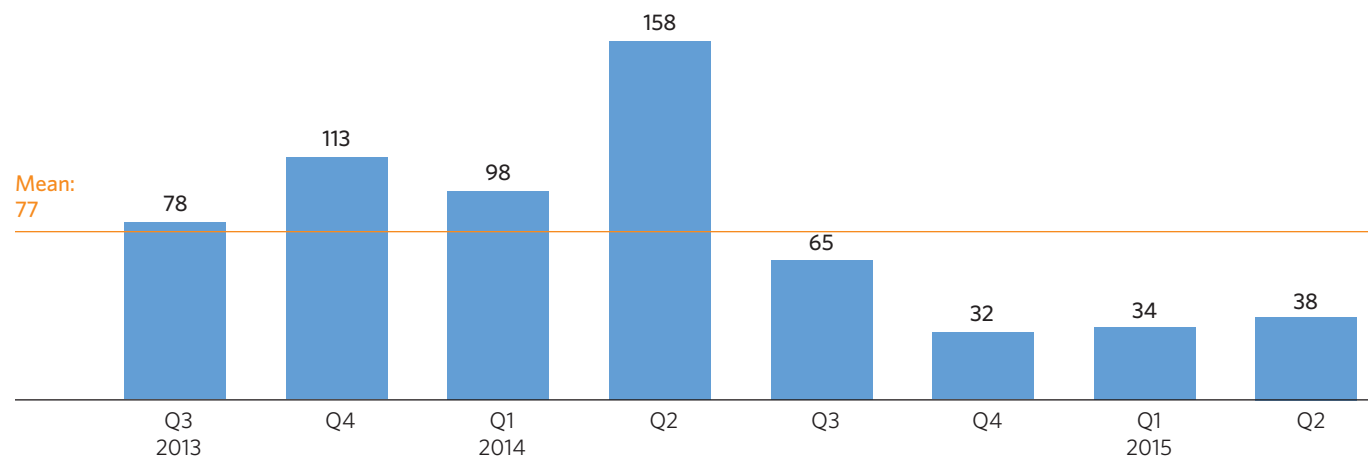
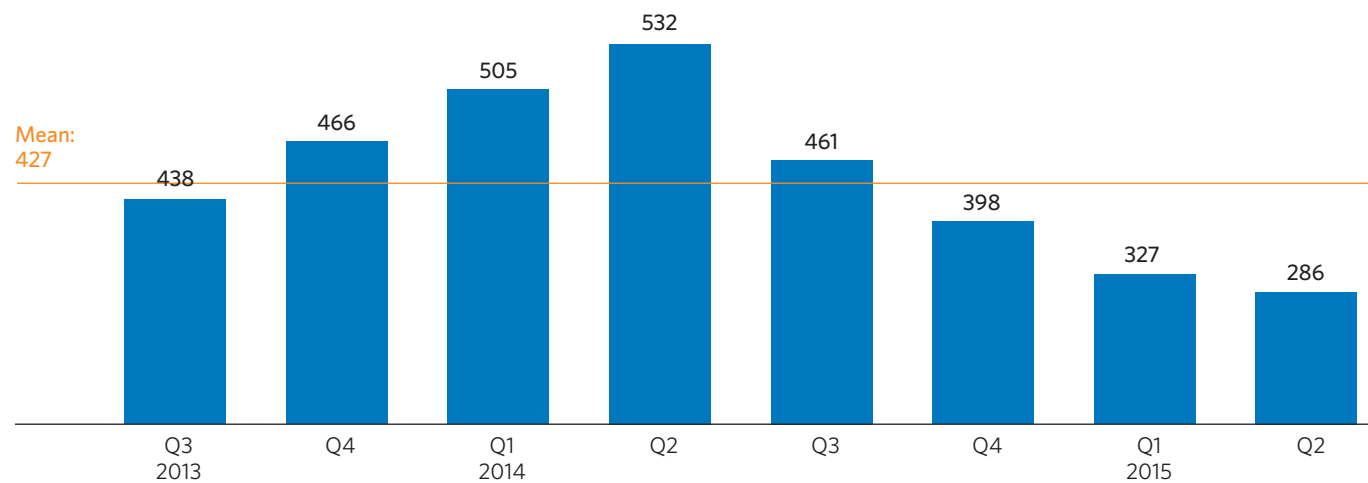


Chart 25: Active Public PAE Cases per Quarter

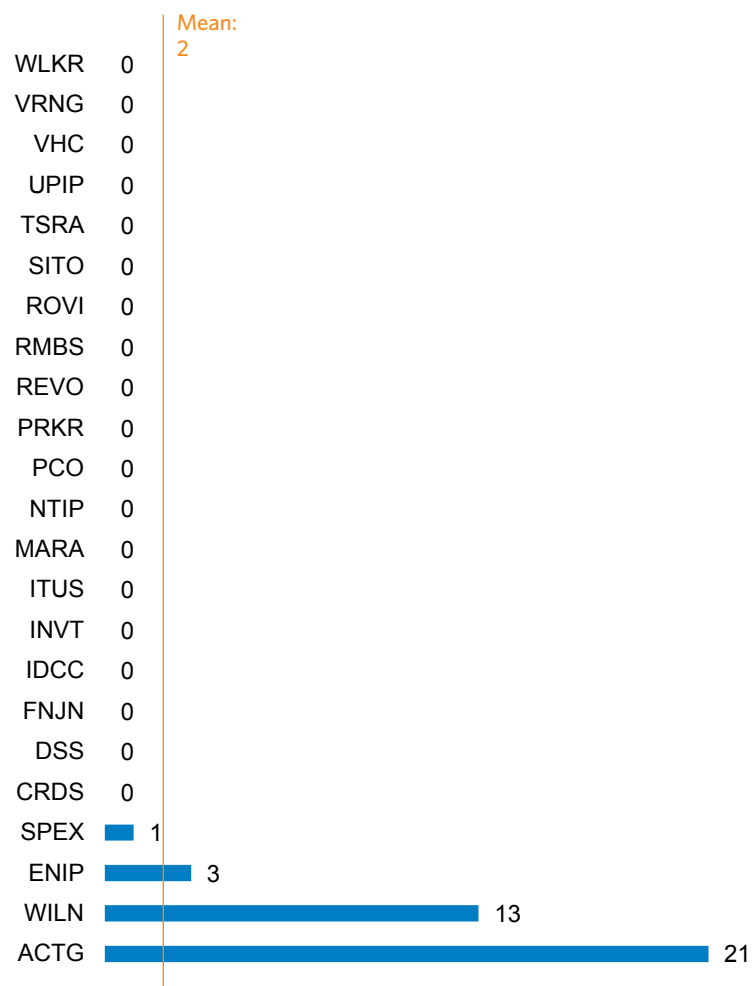
There has been an average of 427 active public PAE cases every quarter since Q3 2013.



Public PAE Litigation Activity Largely Driven by Acacia

Chart 26: Total Cases Filed in Q2 2015

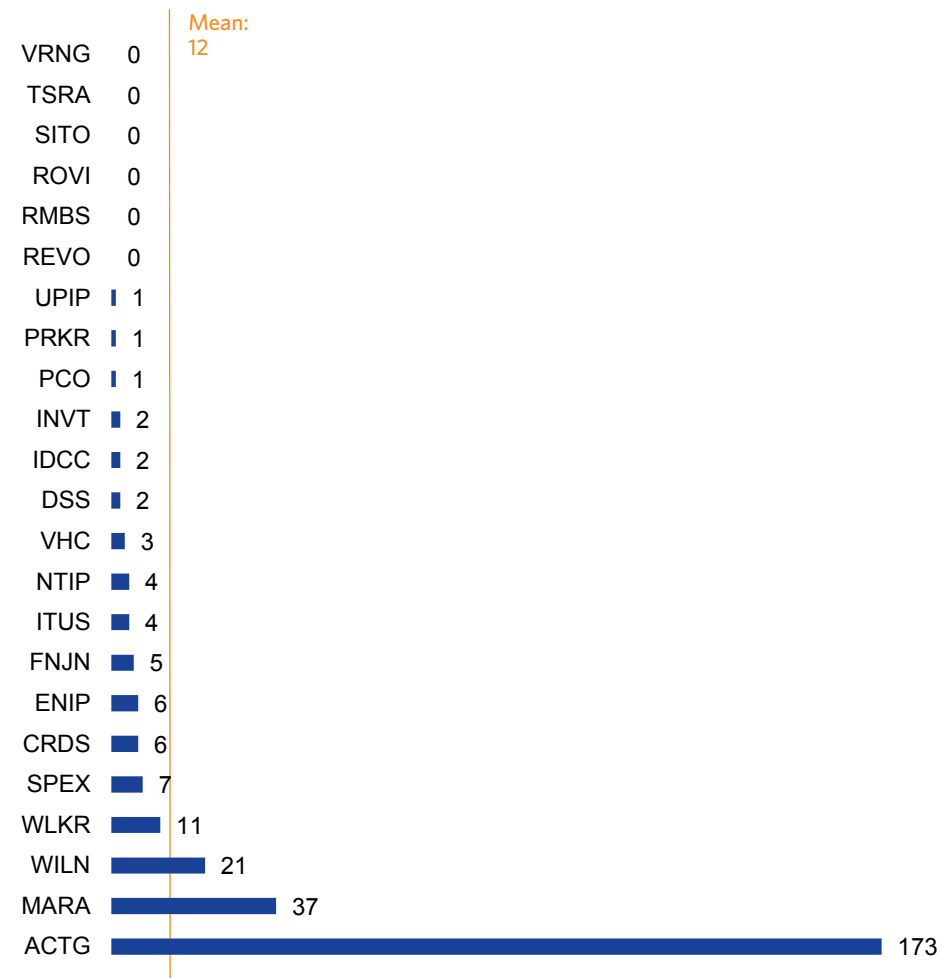
Acacia accounted for 55% of total cases filed by major public PAEs in Q2 2015.



Acacia and Marathon Have the Most Active Cases

Chart 27: Total Active Cases in Q2 2015

Acacia and Marathon are the most active on the public PAE litigation front, with a total of 210 total active cases.



Profiles

The following pages feature overview information and detailed summaries of public PAEs studied in this report.

Overview

Company Name	Formation Type and Description	Primary Technologies
Acacia	Initial public offering in 1995	Consumer Electronics and PCs, E-commerce and Software, Media Content and Distribution, Medical, Mobile Communications and Devices, Networking
Crossroads Systems	First patent infringement case in September 2013	E-commerce and Software, Networking
Document Security Systems	Reverse merger (announced 10/2/12)	E-commerce and Software, Media Content and Distribution, Networking
Endeavor IP	Reverse merger (announced 5/13/13)	Mobile Communications and Devices
Finjan	Reverse merger (announced 6/3/13)	Web and Network Security
InterDigital	Initial public offering in 1981	Mobile Communications and Devices, Networking
Inventergy Global	Reverse merger (announced 12/13/13)	Consumer Electronics and PCs, Mobile Communications and Devices, Networking
ITUS	Began focusing on PAE activity in Q1 2013 (previously an operating company)	Consumer Electronics and PCs, E-commerce and Software, Mobile Communications and Devices
Marathon Patent Group	Reverse merger (announced 11/20/12)	E-commerce and Software, Mobile Communications and Devices, Networking
Network-1	Operating company with PAE activity (first PAE litigation in August 2005)	Networking, Consumer Electronics and PCs, Media Content and Distribution, E-commerce and Software
ParkerVision	First patent infringement case in July 2011 against Qualcomm	Mobile Communications and Devices, Semiconductors
Patent Properties	Reverse merger (announced 7/15/13)	Consumer Electronics and PCs, E-commerce and Software, Media Content and Distribution, Mobile Communications and Devices, Networking
Pendrell	Began focusing on PAE activity second half of 2011 (previously an operating company)	Mobile Communications and Devices , E-commerce and Software

Company Name	Formation Type and Description	Primary Technologies
Rambus	Initial public offering in 1997 with core focus on product licensing	Semiconductors
Revolutionary Concepts	Operating company shift to PAE in 2012 after receiving bulk of its 7 patents midyear 2012	Consumer Electronics
Rovi	Operating company with PAE activity (first PAE litigation in 2007)	Digital entertainment
SITO	Operating company with PAE activity (first PAE litigation in February 2012)	Mobile search, commerce, advertising and streaming media
Spherix	Reverse merger (announced 2/22/13)	Mobile Communications and Devices
Tessera Technologies	Initial public offering in 2004	Semiconductors
Unwired Planet	Began focusing on PAE activity in May 2012 (previously an operating company)	Mobile Communications and Devices, E-commerce and Software
VirnetX	Reverse merger (announced 1/19/07)	Consumer Electronics and PCs, E-commerce and Software, Media Content and Distribution, Mobile Communications and Devices, Networking
Vringo	Reverse merger (announced 3/14/12)	E-commerce and Software
WiLAN	PAE activity since 2007	Consumer Electronics and PCs, Mobile Communications and Devices, Networking

Profiles

Methodology Note:

“Reported Patent Count” refers to the number of patents or portfolios the PAE claims to hold; this count may differ from the number of patent assignments the PAE has recorded with the USPTO.

Acacia Research Corporation

Consumer Electronics and PCs, E-commerce and Software, Media Content and Distribution, Medical, Mobile Communications and Devices, Networking

Stock Price (as of 6/30/15)	\$8.77	Acacia Research Corporation is headquartered in Newport Beach, California. It was founded in 1993, went public in 1995, and began asserting patents in litigation in 2000. The NPE has over 230 subsidiaries and 30 affiliates, only a small portion of which use the Acacia name. In a Q2 2015 corporate presentation, Acacia outlined what it calls “marquee portfolios”—portfolios of patent assets related to smartphones, tablets, PCs, and TVs; medical devices and technology; automotive; and energy. In that same report, Acacia disclosed patent acquisitions and/or privateering partnerships with	PalmSource, Nokia, Rambus, Renesas, Silicon Image, ST Micro, and VoiceAge. Acacia and its subsidiaries hold thousands of patents across a wide range of industries and have been involved in more litigation than any other public PAE. Despite that distinction, as of August 2015, only six of Acacia’s cases have gone to trial, and only one of those litigations has ended in the PAE’s favor.
Market Cap (\$USD M)	\$447.7		
52-week High	\$19.93		
52-week Low	\$8.61		
Cash (\$USD M)	\$166.9		
Debt (\$USD M)	\$0.0		
Employee Count	57		
Reported Patent Count	Over 200 portfolios		

Crossroads Systems, Inc.

E-commerce and Software, Networking

Stock Price (as of 6/30/15)	\$1.53	Crossroads Systems, Inc. initiated, through a Texas subsidiary, its first patent infringement case in September 2013 against Dot Hill Systems. Since then, it has filed multiple infringement cases against various large technology companies, such as Huawei, Cisco, and Oracle. Previously, Crossroads was a provider of data storage solutions and security. Founded in 1996 and headquartered in Austin, TX, Crossroads reports owning more than 100 patents.	In July 2015, the NASDAQ Stock Market notified Crossroads that it had failed to meet the minimum requirements for listing on the exchange. That same month, Crossroads announced amendments to its loan agreement with Fortress Investment Group, deferring for one year principal payments owed.
Market Cap (\$USD M)	\$29.7		
52-week High	\$3.40		
52-week Low	\$1.45		
Cash (\$USD M)	\$5.1		
Debt (\$USD M)	\$3.1		
Employee Count	48		
Reported Patent Count	Over 100		

Document Security Systems, Inc.

E-commerce and Software, Media Content and Distribution, Networking

Stock Price (as of 6/30/15)	\$0.27	Document Security Systems, Inc. (DSS) operates through four segments, DSS Technology Management, Inc. (DSS TM) being the entity primarily responsible for acquiring and/or developing patented technology, with the purpose of monetizing those assets through various means, including litigation. According to the USPTO, DSS, through its subsidiaries, owns at least 100 US patents in disparate technology areas. DSS acquired social networking patents originally issued to Bascom Research, Bluetooth patents originally issued to BBN Corporation, and	many semiconductor patents originally issued to Cypress, Dongbu, and/or ANAM. Since October 2012, DSS has asserted patents from all three of these technologies in over ten patent infringement lawsuits in the US.
Market Cap (\$USD M)	\$12.3		
52-week High	\$1.49		
52-week Low	\$0.21		
Cash (\$USD M)	\$1.3		
Debt (\$USD M)	\$8.4		
Employee Count	111		
Reported Patent Count	Over 100		

Endeavor IP, Inc.

Mobile Communications and Devices

Stock Price (as of 6/30/15)	\$0.00	Endeavor IP, Inc. is a development stage company engaged in the commercialization of IP assets. It is a Nevada corporation currently located at a residential address in Half Moon Bay, CA. (Prior to June 2012, it operated as a workplace ergonomic consultancy under the name Finishing Touches Home Goods Inc.) Endeavor owns at least six patents to date, purchasing wireless network patents from Mesh Comm, LLC. and energy monitoring system patents from Solid Solar Energy, Inc.	Endeavor incorporated two subsidiaries to assert these patents: Endeavor MeshTech, Inc. and Endeavor Energy, Inc. Endeavor has a single employee, Franciscus Diaba, its CEO and Chairman. It has two other directors: Andrew Uribe, an executive with no prior experience in intellectual property acquisition or enforcement, and David Waldman, an investor relations consultant.
Market Cap (\$USD M)	\$0.2		
52-week High	\$0.05		
52-week Low	\$0.00		
Cash (\$USD M)	\$0.0		
Debt (\$USD M)	\$2.0		
Employee Count	1		
Reported Patent Count	6		

Finjan Holdings, Inc.

Web and Network Security

Stock Price (as of 6/30/15)	\$1.38	Finjan Holdings, Inc. was formed in June 2013 as a result of a reverse merger of Finjan, Inc. with Converged Organics, a fertilizer company. The entity's primary business is to monetize the IP portfolio of Finjan, Inc., a former operating company that was founded in 1997 as an online security technology provider. M86 Security acquired Finjan, Inc.'s assets and business operations in 2009, but the company retained its IP portfolio. In 2013, Finjan appointed Phil Hartstein, formerly an IPNav vice president, as its CEO. Finjan and its subsidiaries have filed 13 infringement suits since 2006, mostly in 2013-2014.	The PAE holds at least 22 patents, most of which it has asserted in litigation. In June 2015, Finjan announced plans to re-enter the market for cyber security products and services, introducing the Finjan Mobile Secure Browser for smartphone consumers. In August 2015, a jury in the Northern District of California awarded Finjan \$39.5 million after a two-week patent infringement trial against Blue Coat.
Market Cap (\$USD M)	\$31.1		
52-week High	\$4.53		
52-week Low	\$1.16		
Cash (\$USD M)	\$11.9		
Debt (\$USD M)	\$0.0		
Employee Count	15		
Reported Patent Count	22		

InterDigital, Inc.

Mobile Communications and Devices, Networking

Stock Price (as of 6/30/15)	\$56.89	InterDigital, Inc. is a public patent assertion entity that operates as a research and development company. It was founded in 1972 and went public in 1981. InterDigital has ten known subsidiaries, many of which use the InterDigital name. The PAE has a large patent portfolio, including 220 US patents issuing in 2014 alone; the patents primarily relate to mobile and networking technologies. InterDigital licenses its portfolio to a number of companies involved in wireless communication. It has also filed a small number of enforcement litigations, most of which are still open. The two InterDigital cases that have
Market Cap (\$USD M)	\$2,051.9	
52-week High	\$60.69	
52-week Low	\$38.64	
Cash (\$USD M)	\$907.6	
Debt (\$USD M)	\$475.2	
Employee Count	320	
Reported Patent Count	20,500	

reached resolution both ended in settlement, one with Samsung, and the other with Huawei. Many of the executives in InterDigital's leadership team previously worked for operating companies, including LSI/Agere and LG Electronics.

Inventergy Global

Consumer Electronics and PCs, Mobile Communications and Devices, Networking

Stock Price (as of 6/30/15)	\$0.33	Inventergy launched in June 2013 and became a public entity through a reverse merger with eOn Communications Corp. on December 18, 2013. According to USPTO records, the PAE owns at least two patent portfolios related to mobile communication and devices, acquired from Huawei and Panasonic, which include just fewer than 150 US patents and applications. The entity has no known licensees to its portfolio as of January 2014 but has begun licensing efforts through assertion letters. In press releases, it places significant emphasis on an "elite management team" that includes
Market Cap (\$USD M)	\$11.9	
52-week High	\$2.78	
52-week Low	\$0.25	
Cash (\$USD M)	\$5.4	
Debt (\$USD M)	\$15.5	
Employee Count	15	
Reported Patent Count	755	

individuals who have previously worked in management and executive positions for technology companies. CEO Joe Beyers was formerly the head of IP licensing for HP, and Paul Roberts, the VP of IP licensing, was formerly at patent assertion entity Rovi. General Counsel Wayne Sobon was previously at Rambus. Beyers has repeatedly loaned Inventergy money since 2013, and in April 2015, the entity replaced its fulltime CFO with a contract CFO to cut costs.

ITUS Corporation

Consumer Electronics and PCs, E-commerce and Software, Mobile Communications and Devices

Stock Price (as of 6/30/15)	\$4.00	ITUS Corporation develops, acquires, licenses, and enforces patented technologies for the purposes of patent monetization and patent assertion. Formed in 1982, it was originally an operating company called Copytele, Inc. offering a line of encryption products. It began significant patent enforcement activity in early 2013, changing its name to ITUS in September 2014. PAE reportedly holds over 100 patents and patent applications that it organizes into the following areas: Key Based Web Conferencing Encryption, Encrypted Cellular Communications, E-Paper Electrophoretic Display, Nano Field
Market Cap (\$USD M)	\$35.0	
52-week High	\$8.95	
52-week Low	\$1.39	
Cash (\$USD M)	\$8.5	
Debt (\$USD M)	\$0.0	
Employee Count	7	
Reported Patent Count	8 portfolios	

Emission Display (nFED), Micro Electro Mechanical Systems Display (MEMS), Loyalty Conversion Systems, J-Channel Window Frame Construction, VPN Multicast Communications, Internet Telephonic Gateway, and Enhanced Auction Technologies. In July 2015, ITUS stock began trading on the NASDAQ, and the company announced settlement and dismissal of an infringement action, of a patent related to promoting items on an auction web site, filed by its subsidiary Auction Acceleration Corporation against eBay, Auctiva, and Vendio Services in September 2014.

Marathon Patent Group, Inc.

E-commerce and Software, Mobile Communications and Devices, Networking

Stock Price (as of 6/30/15)	\$2.90	Marathon Patent Group, Inc. is a patent acquisition and monetization company. It was formerly known as American Strategic Minerals Corporation and changed its name to Marathon in February 2013. Marathon was incorporated in 2010 and is based in Alexandria, Virginia. Marathon acquires patents from various sources, from individual inventors to Fortune 500 companies. Marathon has monetized its portfolios through actively managed patent licensing and litigation campaigns. It reports owning more than 370 patents and patent applications and has been involved in more than 350 patent litigations in the
Market Cap (\$USD M)	\$40.6	
52-week High	\$9.73	
52-week Low	\$2.76	
Cash (\$USD M)	\$1.5	
Debt (\$USD M)	\$33.0	
Employee Count	9	
Reported Patent Count	371	

US. It has mainly targeted companies in the e-commerce and software sector followed by media content and distribution sector and networking industry. It most recently filed suit, through a subsidiary, in July 2015. In August 2015, Marathon announced a merger with Uniloc Luxembourg SA, an NPE that has, together with its corporate affiliates, filed over 100 of its own lawsuits. Douglas Croxall, Marathon's CEO, will remain CEO of the merged company. Uniloc's most recent patent infringement actions were also filed in July 2015.

Network-1 Technologies, Inc.

Networking, Consumer Electronics and PCs, Media Content and Distribution, and E-commerce and Software

Stock Price (as of 6/30/15)	\$1.71	Network-1 Technologies, Inc. is a patent licensing firm, founded in 1990, that has filed almost 20 suits, together with subsidiary Mirror Worlds Technologies, LLC, since 2004. Network-1's two most active campaigns assert power-over-Ethernet and document streaming patents. The entity owns more than 20 patents, all acquired from other sources, including some developed by Mirror Worlds prior to its acquisition. Network-1 has asserted only a handful of patents in litigation; it has not taken any case to trial. Most of Network-1's operating income comes from licensing the 6,218,930 patent, which has
Market Cap (\$USD M)	\$40.1	
52-week High	\$2.40	
52-week Low	\$1.59	
Cash (\$USD M)	\$17.8	
Debt (\$USD M)	\$0.0	
Employee Count	3	
Reported Patent Count	24	

purportedly generated \$70M since 2007. In May 2014, claims of the '930 patent were challenged in an IPR by Avaya, Dell, Sony, and HP, but emerged unscathed. In October 2014, the PTO issued a reexam certificate with no change to the '930 patent's claims.

ParkerVision, Inc.

Mobile Communications and Devices, Semiconductors

Stock Price (as of 6/30/15)	\$0.38	ParkerVision, Inc. claims that it designs, develops, and markets proprietary radio frequency (RF) technologies and products for use in semiconductor circuits for wireless communication products in the US. ParkerVision touts a three-part growth strategy for commercializing innovations that includes intellectual property licensing and/or product ventures, intellectual property enforcement, and product and component development, manufacturing, and sales. Current CEO Jeffrey L. Parker is an inventor on several of the company's patents, which reportedly total over 300. In October 2013, ParkerVision
Market Cap (\$USD M)	\$36.6	
52-week High	\$1.56	
52-week Low	\$0.33	
Cash (\$USD M)	\$4.0	
Debt (\$USD M)	\$0.1	
Employee Count	48	
Reported Patent Count	312	

won an infringement verdict against Qualcomm, and in May 2014, it filed another suit against Qualcomm, HTC, and Samsung. The PTAB has instituted IPRs for several ParkerVision patents based on petitions filed by RPX.

Pendrell Corporation

Mobile Communications and Devices, E-commerce and Software

Stock Price (as of 6/30/15)	\$1.37
Market Cap (\$USD M)	\$365.2
52-week High	\$1.91
52-week Low	\$0.95
Cash (\$USD M)	\$156.1
Debt (\$USD M)	\$0.0
Employee Count	57
Reported Patent Holding	1,200

Pendrell Corporation is a patent investment company that acquires both patents and patent holding entities. It has 14 known subsidiaries, many of which hold patents in their own names and several of which provide IP monetization analysis to Pendrell. Since 2012, only one subsidiary, ContentGuard Holdings, Inc., has filed lawsuits. Pendrell began as an operating company named ICO Global and was involved in satellite communication through the 1990s and 2000s. In June 2011, that company renamed itself and began licensing efforts. Pendrell reports holding more than 1,200 patents and

applications. Its largest portfolio, assigned to ContentGuard, contains patents related to digital rights management (DRM). Others relate to media content, networking, semiconductors, data storage/security, and wireless communication.

Rambus, Inc.

Semiconductors

Stock Price (as of 6/30/15)	\$14.49
Market Cap (\$USD M)	\$1,673.2
52-week High	\$15.49
52-week Low	\$9.87
Cash (\$USD M)	\$348.1
Debt (\$USD M)	\$156.8
Employee Count	505
Reported Patent Count	1,765

Rambus Inc. is a technology development and licensing company that was founded in 1990. Since 2000, Rambus has filed almost 30 suits involving more than 50 patents. The entity owns a portfolio of over 1,500 US patent publications, all of which relate to various aspects of semiconductor technology. Rambus also has an active licensing program for the technology that it develops. Rambus has secured substantial revenues from its patent enforcement programs, including a \$397M damages award against Hynix Semiconductor in March 2009 and a \$900M settlement with Samsung in January 2010. It has not

filed new litigation since 2010, but it sold a portfolio of patents to Acacia Research Corporation in 2013, some of which are now involved in an active campaign. In August 2015, Rambus announced that it would become, at least in part, a fabless chip company, hiring third party entities to manufacture the chips that it designs for the first time in over 25 years.

Revolutionary Concepts, Inc.

Consumer Electronics

Stock Price (as of 6/30/15)	\$0.00
Market Cap (\$USD M)	\$3.0
52-week High	\$0.01
52-week Low	\$0.00
Cash (\$USD M)	\$0.0
Debt (\$USD M)	\$1.2
Employee Count	Not disclosed
Reported Patent Count	7

Revolutionary Concepts, Inc. (RCI) is a technology development company that develops patents related to mobile video software and security communications systems. It has not filed any assertion litigation, but in February 2014, RCI licensed its patents to Eyetalk365, LLC. In September 2014, Eyetalk launched a campaign asserting RCI's patents against four security companies. RCI will receive 40% of any gross profit generated from the litigation campaign and any additional licensing efforts. The deal also included the cancellation of

\$900K of debts held by RCI. According to its most recent SEC filings, RCI does not currently generate any revenue.

Rovi Corporation
Digital Entertainment

Stock Price (as of 6/30/15)	\$15.95
Market Cap (\$USD M)	\$1,466.4
52-week High	\$26.44
52-week Low	\$15.57
Cash (\$USD M)	\$216.8
Debt (\$USD M)	\$1,069.9
Employee Count	1,200
Reported Patent Count	5,902

Rovi Corporation, formerly known as Macrovision Solutions Corporation, began as an operating company selling digital entertainment services. Since its rebranding in 2009, the entity has focused more on licensing its portfolio. According to SEC filings, Rovi owns over 5,000 patents and patent applications, and it derives more than half of its revenue from licensing. Rovi has sued some entertainment and media streaming companies, including Amazon, Hulu, Lenovo, LGE, and Toshiba, but has not filed new litigation since 2012. In July 2015, a court in the

Northern District of California invalidated five patents asserted against Netflix on *Alice*-related grounds. With the court's dismissal of that action, Rovi does not currently have any active litigation. It has not taken a patent assertion case to a district court trial. Rovi's portfolio mainly relates to content discovery, DVR and VOD functionality, multi-screen functionality, as well as interactive applications and advertising.

SITO Mobile, Ltd.
Mobile Search, Commerce, Advertising and Streaming Media

Stock Price (as of 6/30/15)	\$3.60
Market Cap (\$USD M)	\$55.4
52-week High	\$4.89
52-week Low	\$1.48
Cash (\$USD M)	\$2.8
Debt (\$USD M)	\$9.0
Employee Count	21
Reported Patent Count	Not disclosed

SITO Mobile, Ltd., formerly Single Touch Systems, Inc., is an operating company that began monetizing its patents in 2012. SITO's mobile platform purportedly enables clients to send personalized messages and ads to customers based on their user preferences and purchase histories. SITO made a series of announcements in late 2014 that signal a shift in its business model, including a \$10M credit facility and a \$1M equity investment received from Fortress Investment Group. The loan is secured by SITO's patent portfolio. In July 2015, SITO acquired the mobile advertising business from Hipcricket,

which filed bankruptcy, and in August 2015, SITO announced that its stock would begin trading on the NASDAQ exchange. According to the USPTO, SITO holds at least 25 US patents as of August 2015. The company has asserted only three of its patents in litigation, in 2012 cases against Zoove and Hulu. The complaints targeted defendants' mobile marketing platforms. The cases both terminated within a year of the complaints being filed.

Spherix, Inc.
Mobile Communications and Devices

Stock Price (as of 6/30/15)	\$0.48
Market Cap (\$USD M)	\$13.7
52-week High	\$1.89
52-week Low	\$0.44
Cash (\$USD M)	\$0.9
Debt (\$USD M)	\$0.5
Employee Count	5
Reported Patent Count	Over 330

Spherix, Inc. began as a research company in 1967 and owns more than 300 patents and applications, including a portfolio acquired from Rockstar Consortium in July 2013. Many of its patents relate to aspects of wireless communication and networking, and those patents have been asserted in its litigations. Spherix began asserting patents in litigation in 2011, but filed most of its litigations in 2013 and 2014. Spherix has more recently, in May 2015, filed a lawsuit against Verizon and Cisco in the Eastern District of Virginia. On June 30, 2015, Cisco counter-sued in the District of Delaware, alleging that

Spherix's history of litigation against Cisco (and its customer Verizon) has violated obligations to license the patents-in-suit, which Spherix contends are standard-essential, under terms consistent with Spherix's FRAND obligations. More than half of Spherix's cases have concluded, but none have reached trial. In addition to litigation, Spherix monetizes its portfolios through licensing and partnerships with operating companies.

Tessera Technologies, Inc.
Semiconductors

Stock Price (as of 6/30/15)	\$37.98
Market Cap (\$USD M)	\$1,998.3
52-week High	\$43.71
52-week Low	\$21.38
Cash (\$USD M)	\$431.9
Debt (\$USD M)	\$0.0
Employee Count	203
Reported Patent Count	3,705

Tessera Technologies, Inc. is an operating company that began asserting its patents in litigation in 2000. The former designer of semiconductor miniaturization technologies underwent a “turnaround campaign”, or shareholder intervention, led by Starboard Value LP in 2013. It refocused on monetization of its patent portfolio. As of June 2015, Tessera has at least 30 known subsidiaries, including Invensas Corporation, which has been active in litigation. In August 2015, Tessera acquired Ziptronix, Inc., a semiconductor company with patent holdings of its own, as well as an ongoing patent case against OmniVision and

TSMC. USPTO records indicate that Tessera holds over 2,120 US patents as of August 2015. More than 20 of those patents have been asserted by Tessera in litigation, mostly against chip manufacturers and companies that make and/or sell electronics that include semiconductor chips. Defendants have included Advanced Micro Devices, Acer, Freescale, Hitachi, Motorola Mobility, Qualcomm, Spansion, and STMicroelectronics. In August 2015, a California state court confirmed an arbitration award, in excess of \$125 million, to Tessera by Amkor for violation of its license agreement.

Unwired Planet, Inc.
Mobile Communications and Devices, E-commerce and Software

Stock Price (as of 6/30/15)	\$0.62
Market Cap (\$USD M)	\$69.5
52-week High	\$2.29
52-week Low	\$0.54
Cash (\$USD M)	\$85.5
Debt (\$USD M)	\$29.9
Employee Count	15
Reported Patent Count	2,500

Unwired Planet, Inc., previously Openwave Systems, is an operating company turned PAE. In 2012, the entity announced that it would focus exclusively on the monetization and enforcement of its patent portfolio. Unwired Planet received a \$50M investment from Indaba Capital Fund in June 2013 to finance its licensing efforts. William Marino, the CEO of Pragmatus, and Rich Chernicoff, past President of Tessera IP Corp., are among Unwired Planet’s board members. Unwired Planet reportedly holds 2,500 patent assets, many of them acquired in a controversial deal with Ericsson, which Unwired

Planet says focus exclusively on mobile technologies. The entity has filed six infringement suits since 2009, asserting over 30 patents against defendants including Apple, Google, RIM, and Square. Unwired Planet has no active litigation as of September 1, 2015. Boris Teksler, a former IP executive at both HP and Apple, joined Unwired Planet as CEO in June 2015.

VirnetX
Consumer Electronics and PCs, E-commerce and Software, Media Content and Distribution, Mobile Communications and Devices, Networking

Stock Price (as of 6/30/15)	\$4.20
Market Cap (\$USD M)	\$218.9
52-week High	\$18.24
52-week Low	\$3.80
Cash (\$USD M)	\$28.1
Debt (\$USD M)	\$0.0
Employee Count	14
Reported Patent Count	187

VirnetX develops and asserts security technology patents. At least 20 of VirnetX’s patents originated with Science Application International Corporation, a defense contractor that formerly employed VirnetX’s founders as well as its current CTO and Chief Scientist. Kendall Larsen is President and CEO; his prior experience includes a senior position at CIA contractor Phoenix Technologies. On the basis of regulatory filings, it appears that Larsen has used VirnetX shares as collateral for personal lines of credit. According to the USPTO, VirnetX holds at least 47 US patents as of August 2015, nine

of which have been asserted in litigation. VirnetX has filed ten infringement suits since 2007 against companies including Apple, Cisco, and Microsoft. In September 2014, the Federal Circuit vacated a jury verdict that ordered Apple to pay VirnetX \$368M in damages for infringement of a group of VPN and secure communications patents.

Vringo, Inc.

E-commerce and Software

Stock Price (as of 6/30/15)	\$0.56
Market Cap (\$USD M)	\$53.3
52-week High	\$3.66
52-week Low	\$0.46
Cash (\$USD M)	\$20.2
Debt (\$USD M)	\$8.6
Employee Count	13
Reported Patent Count	600

Vringo, Inc. is a PAE that merged with Innovate/Protect, a privately held patent assertion entity, in July 2012. The reverse merger resulted in the acquisition of a portfolio of patents that originated with Lycos as well as Innovate/Protect subsidiary I/P Engine. Vringo personnel include Andrew “Ken” Lang, CTO, formerly of Lycos, and David Cohen, Chief Legal and IP Officer, formerly of Nokia. The PAE has at least five known entities, including Vringo Infrastructure, its only subsidiary besides I/P Engine that has been active in litigation.

As of August 2015, Vringo has filed only four infringement suits in the US, all of which have closed; the cases assert a total of three patents. In August 2014, the Federal Circuit invalidated two of Vringo’s patents litigated against AOL, Gannet, Google, IAC, and Target, reversing a 2012 jury verdict that ordered the defendants to pay I/P Engine \$30M. Vringo is engaged in ongoing litigation outside the US, particularly against various international ZTE entities.

Walker Innovation Inc.

Consumer Electronics and PCs, E-commerce and Software, Media Content and Distribution, Mobile Communications and Devices, Networking

Stock Price (as of 6/30/15)	\$1.44
Market Cap (\$USD M)	\$29.9
52-week High	\$3.03
52-week Low	\$1.20
Cash (\$USD M)	\$9.3
Debt (\$USD M)	\$0.0
Employee Count	22
Reported Patent Count	493

Walker Innovation Inc. is an inventor-controlled entity that formed in 2013 as a result of a reverse merger of Global Options Group with Walker Digital, LLC. Walker Innovation changed its name from Patent Properties, effective July 31, 2015. The entity is controlled by inventor and entrepreneur Jay Walker, the founder of Priceline. Walker Innovation reports holding nearly 500 patents, many of which name Walker as an inventor. They relate to a range of technologies, including authentication techniques, Internet searches and advertising, and online transactions. As of August 2015, Walker Innovation

itself has not filed a single patent infringement suit; however, its 12 known subsidiaries, including Walker Digital and Inventor Holdings, have filed more than 60 infringement suits against over 150 companies since 2009.

WiLAN Inc.

Consumer Electronics and PCs, Mobile Communications and Devices, Networking

Stock Price (as of 6/30/15)	\$2.32
Market Cap (\$USD M)	\$279.7
52-week High	\$3.49
52-week Low	\$1.88
Cash (\$USD M)	\$114.1
Debt (\$USD M)	\$34.5
Employee Count	66
Reported Patent Count	Not disclosed

WiLAN Inc. is a Canadian PAE that began litigating its patents in 2007. It was established in 1992 as an operating company selling products and licensing its inventions. In 2006, after years of stagnant stock valuation, it became an assertion-only entity. Both WiLAN’s CEO, Jim Skippen, and its COO, Michael Vladescu, came from MOSAID (now Conversant IP). WiLAN reportedly made several bids to purchase MOSAID—an effort that eventually fell through in 2011. In June 2015, Skippen announced plans to retire. WiLAN has over 30 known subsidiaries, including Open Network Solutions, its most active

subsidiary in litigation. In Q1 2014, WiLAN announced it would shift its focus from outright patent acquisition to privateering deals with patent holders. As of September 2015, WiLAN has filed over 50 cases against more than 75 companies, mostly defendants that manufacture and/or sell electronics and mobile devices. In the past, the PAE has reported owning over 4,000 patents.

About RPX

RPX Corporation (NASDAQ: RPXC) helps operating companies reduce the cost and risk associated with NPE (non-practicing entity) patent litigation. Members of the RPX client network pay an annual fee that reflects their particular NPE risk. We then use this aggregated capital to acquire potentially problematic patents and rights in the open market and out of active litigations before they can become a costly problem for our clients. RPX promises never to litigate or assert the patents it purchases.

In addition to our core defensive patent acquisition service, RPX also negotiates syndicates to purchase and clear significant portfolios from the market on behalf of our clients. And we offer unique NPE litigation insurance—with policies written on A rated paper (AM Best) and backed by a Lloyd's syndicate. Further, RPX provides clients with in-depth industry data, market intelligence, and patent advisory services.

RPX has invested nearly \$2 billion to acquire 10,000+ US and international patent assets and rights, achieved more than 800 litigation dismissals, and prevented more than 3,000 NPE litigations from occurring. Since our founding in 2008, we have saved our clients more than \$2.5 billion in avoided NPE legal and settlement costs.

The RPX network comprises more than 220 clients in sectors including automotive, consumer electronics and personal computing, E-commerce and software, financial services, media content and distribution, mobile communications, networking and semiconductors.

Contacts

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