IP3 2018 ANALYTICS FOR MEDIA

January 23, 2019





IP3 2018 Overview

- IP3 2018 was the third iteration of AST's Industry Patent Purchase Program, a fixed price, fixed term, collaborative patent buying program that provides patent owners access to dozens of leading technology companies
- Submission period: July 9 through July 20, 2018
- IP3 2018 focused on soliciting patents from the following technology areas:
 - > Artificial Intelligence / Machine Learning
 - > Augmented Reality / Virtual Reality
 - > Automotive / Transportation Services
 - > Blockchain
 - Internet of Things / Connected Devices
 - > Smart Home
 - > Software / Web Services
 - > Wireless
- Participants: 19 operating companies including: Cisco, Google, Honda, IBM, Intel, Microsoft, Oracle, Philips, SAP, Uber and Verizon
- Total Spent: ~ \$3M



IP3 2018 Results Summary

\$3M spent to acquire 32 patent families

- Purchased Deals
 - > 31 deals acquired
 - 32 families, 47 U.S. Patents, 55 active assets
 - > Ranged from \$2,500 to \$255,000
 - > Avg. price per patent family approx. **\$99**k
 - (compared to \$128k in IP3 2017, and \$96k for IP3 2016)
 - 19 Members contributed to acquisitions
- AST closed all 31 deals before the year-end



AST data as of December 2018

IP3 2018 Submission Stats

- 704 submissions were received out of which 32 submissions were rejected or excluded from program due to subject matter, family issues, etc.
 - > Slightly higher number of lots compared to IP3 2017
- 672 valid submissions published as individual AST lots
 - All information was available to AST members through AST's proprietary fAST IP database
- 803 patent families
 - > 1,646 active assets
 - > 1,154 active US patents
 - > 92% or 617 lots were single patent family offerings
 - > 47 lots with 2-5 patent families
 - > 8 lots with more than 5 patent families



IP3 Submissions by Seller Submitted Categories

Seller Submitted Category	Lots	Patent Families	WW Assets
Software / Web Services	230	239	447
Wireless	128	148	283
Automotive / Transportation Services	112	4	291
Internet of Things / Connected Devices	70	85	194
Augmented Reality / Virtual Reality	55	77	139
Artificial Intelligence / Machine Learning	28	32	120
Smart Home	18	18	25
Blockchain	12	13	26
Other	19	50	121
Grand Total	672	803	I,646

- Software & Web Services was the leading seller submitted technology category for IP3 lots with 230 lots with 239 patent families
- Blockchain had significant interest from Members but very few assets were received in the category
- I9 out of 31 purchased lots were related to Software and Web Services category



AST data as of December 2018

What was Purchased?

- 31 AST Lots purchased in IP3 comprised 55 active patent filings in 32 families
 - > 47 US Patents, 6 US Applications
 - > I European and I Austrian Patent
- Average 1.7 assets per family compared to 3.6 in 2017 and 1.8 in 2016
 - > 15 lots with single US patent, 6 lots with two US filings, 8 lots with 3 US filings
 - > 2 lots each with a single foreign patent
- 23 different sellers and 4 brokers
 - > 21 out of 31 purchased deals are from Brokers/Intermediaries
 - > Type of Sellers -
 - I6 lots from NPE/PHC
 - 7 lots from Individual Inventors
 - 5 lots from Practicing Entities
 - 2 lots from University and 1 from R&D Institute
- 77% or 24 purchased lots were previously received by AST



31 IP3 Lots Purchased - \$2,500 to \$255,000

Average Purchase Price for IP3 = \$98,887



- Median purchase price is \$95,000
- Average price paid is lower compared to all IP3 lots
 - Sweet spot appears to be in \$60K-\$150K
- 21 or 68% of all purchased deals are offered by Brokers
 - Slightly lower ratio than last year as more Sellers decided to sell direct



IOT, Automotive and AI had higher prices

Price Expectation Per Lot by Seller Submitted Category

Seller Submitted Category	Purchased Deals			<\$500K Deals		
	Lots	Patent Families	Average Per Lot	Lots	Patent Families	Average Per Lot
Software / Web Services	19	20	\$94,763	221	229	\$97,762
Wireless	2	2	\$65,000	120	129	\$102,242
Automotive / Transportation Services	3	3	\$165,000	108	134	\$105,343
Internet of Things / Connected Devices	3	3	\$141,667	63	74	\$145,306
Augmented Reality / Virtual Reality	2	2	\$57,500	50	53	\$132,300
Artificial Intelligence / Machine Learning	2	2	\$50,000	22	22	\$164,318
Smart Home				16	16	\$98,181
Other				16	47	\$189,813
Blockchain				12	13	\$142,083
Total	31	32	\$98,887	628	717	\$112,976



AST data as of December 2018

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Services assets had the highest avg. sales price

Price Expectation <u>Per Lot</u> by AST Lot Category

AST Lot Category	Purchased Deals			<\$500K Deals		
	Lots	Patent Families	Average Per Lot	Lots	Patent Families	Average Per Lot
Software	П	П	\$75,955	172	176	\$109,749
Communication	10	10	\$115,500	164	174	\$105,829
General Electronics	5	6	\$51,000	98	125	\$127,059
Services	3	3	\$186,667	86	106	\$121,453
Automotive	2	2	\$130,000	37	41	\$97,378
Audio-Video-Graphics				35	48	\$119,571
Components				29	40	\$103,690
Other				7	7	\$146,286
Total	31	32	\$98,887	628	717	\$112,976



AST data as of December 2018

THANK YOU



