

The High Tech Inventors Alliance represents the companies that actually innovate and manufacture in the U.S. Our members — including Micron, Google, Intel, Cisco, Oracle, and others — employ more than a million American workers, invest billions in R&D, and manufacture products used by consumers around the world. When patent trolls come calling, IPR is often our only efficient, affordable recourse.

## MYTH #1: GUTTING IPR PROTECTS THE LITTLE GUY.

**It does the opposite.** Restricting access to IPR primarily protects patent trolls and hurts operating companies of all sizes. Without IPR, operating companies face a choice between engaging in expensive district court litigation and simply paying a settlement, regardless of patent merit. The truth is that only about 7% of defendants sued by patent trolls are large companies with over \$10 billion in revenues, while more than half are small companies with revenues under \$25 million. Similarly, more than half of the targets of troll suits are companies with fewer than 100 employees.

## MYTH #2: PATENT OWNERS TARGETED IN IPRs ARE SMALL INNOVATORS.

**Look at who is actually on the other side.** The list is dominated by patent assertion entities (PAEs) — shell companies that don't make or sell anything and exist solely to monetize patent portfolios by leveraging litigation. Over 60% of the top 100 patent owners by case volume are PAEs, many affiliated with or funded by hedge funds or foreign sovereign wealth funds with tens of billions of dollars. And the vast majority assert second-hand patents they bought on the secondary market and have never been granted a single patent. These are anything but garage inventors. Most are well-financed litigation vehicles that have never invested a penny in R&D.

## TIPPING THE SCALES TO TROLLS



### THE PRODUCTIVE U.S. ECONOMY

Majority of IPR Petitioners  
*Unable to fight back*



### PAEs & PATENT TROLLS

61% of Patent Owners  
*Freed to assert invalid patents*



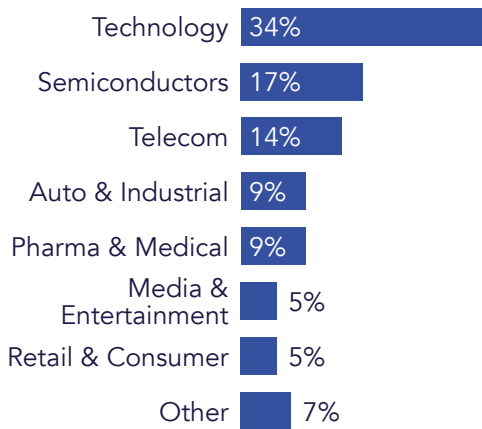
## MYTH #3: ACCESS TO IPRs PROTECTS ONLY BIG TECH

**The facts say otherwise.** Yes, technology companies are big users of IPR — but so are automakers, health-care and biopharma companies, financial services providers, energy firms, telecom companies, and semiconductor manufacturers. **IPR is used across virtually every sector of the U.S. economy** — by companies that build cars, develop life-saving drugs, power the electric grid, and connect American families. It is a broadly shared defense mechanism for any operating company that makes real products and faces patent assertions that threaten their ability to do so.

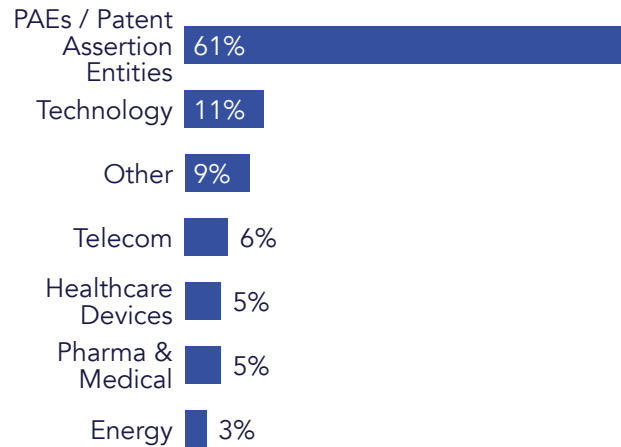
### THE NUMBERS TELL THE STORY:

#### Top 100 IPR Petitioners

*Nearly every major sector of the productive U.S. economy*



#### Top 100 Patent Owners



The top 100 IPR users are overwhelmingly innovative operating companies. They collectively invest more than \$200 billion each year in R&D and have received more than 800,000 U.S. patents. They have also pledged more than \$3 trillion in planned investments in the U.S., including for semiconductor manufacturing plants, auto factories, and AI infrastructure. The entities targeted in IPRs are overwhelmingly trolls that don't spend a penny on R&D, invest nothing in U.S. facilities, and have never invented anything or been granted a single patent.

### THE BOTTOM LINE

**The data is clear:** IPR petitioners are America's most productive companies in our most important industries. Efforts to limit IPR access should be understood for what they are: **a gift to the patent troll industry, paid for by American innovators.**

Top 100 IPR Petitioners

Rank	Petitioner	Industry	Rank	Petitioner	Industry
1	Samsung Electronics Co Ltd	Semiconductors	51	Amazon Web Services Inc	Technology
2	Apple Inc	Technology	52	Huawei Technologies Co Ltd	Telecom
3	Google LLC	Technology	53	International Business Machines Corp	Technology
4	Samsung Electronics America Inc	Technology	54	Merck Sharp & Dohme LLC	Pharma / Medical
5	Microsoft Corp	Technology	55	Toshiba America Information Systems Inc	Technology
6	Intel Corp	Semiconductors	56	Lenovo US Inc	Technology
7	LG Electronics Inc	Technology	57	RPX Corp	Defensive Patent Aggregator
8	Unified Patents LLC	Defensive Patent Aggregator	58	Tesla Inc	Auto / Industrial
9	Cisco Systems Inc	Technology	59	The Gillette Company LLC	Retail / Consumer
10	Comcast Cable Communications LLC	Telecom	60	Globalfoundries Dresden Module One LLC	Semiconductors
11	Ericsson Inc	Telecom	61	Globalfoundries Dresden Module Two LLC	Semiconductors
12	Dell Inc	Technology	62	Telefonaktiebolaget LM Ericsson	Telecom
13	Facebook Inc	Technology	63	Hulu LLC	Media / Entertainment
14	ZTE Corp	Telecom	64	Amneal Pharmaceuticals Inc	Pharma / Medical
15	Mylan Pharmaceuticals Inc	Pharma / Medical	65	Apotex Inc	Pharma / Medical
16	Micron Technology Inc	Semiconductors	66	AT&T Services Inc	Telecom
17	Taiwan Semiconductor Manufacturing Co Ltd	Semiconductors	67	AT&T Corp	Telecom
18	HTC Corp	Technology	68	Pfizer Inc	Pharma / Medical
19	Sony Corp	Technology	69	Snap Inc	Technology
20	Amazon.com Inc	Retail / Consumer	70	Halliburton Energy Services Inc	Energy
21	HTC America Inc	Technology	71	Renesas Electronics Corp	Semiconductors
22	Volkswagen Group of America Inc	Auto / Industrial	72	TRW Automotive US LLC	Auto / Industrial
23	T-Mobile USA Inc	Telecom	73	Lenovo Inc	Technology
24	Meta Platforms Inc	Technology	74	Toshiba America Electronic Components Inc	Semiconductors
25	Amazon Inc	Retail / Consumer	75	WhatsApp LLC	Technology
26	Globalfoundries US Inc	Semiconductors	76	SAP America Inc	Technology
27	Amazon.com Services LLC	Retail / Consumer	77	T-Mobile US Inc	Telecom
28	Cellco Partnership	Telecom	78	Vizio Inc	Technology
29	Ford Motor Co	Auto / Industrial	79	Renesas Electronics America Inc	Semiconductors
30	Toshiba Corp	Technology	80	Canon Inc	Technology
31	Roku Inc	Media / Entertainment	81	Fujitsu Semiconductor America Inc	Semiconductors
32	Motorola Mobility LLC	Telecom	82	Fujitsu Semiconductor Ltd	Semiconductors
33	Toyota Motor Corp	Auto / Industrial	83	Supercell Oy	Media / Entertainment
34	Dish Network Corp	Media / Entertainment	84	LG Electronics USA Inc	Technology
35	Nokia of America Corp	Telecom	85	SK Hynix Inc	Semiconductors
36	Dell Technologies Inc	Technology	86	Smith & Nephew Inc	Healthcare Devices
37	Advanced Micro Devices Inc	Semiconductors	87	Askeladden LLC	Defensive Patent Aggregator
38	Qualcomm Inc	Semiconductors	88	Instagram Inc	Technology
39	American Honda Motor Co Inc	Auto / Industrial	89	Nokia Corp	Telecom
40	Mercedes-Benz USA LLC	Auto / Industrial	90	BlackBerry Ltd	Technology
41	Hewlett Packard Enterprise Co	Technology	91	Nissan North America Inc	Auto / Industrial
42	Juniper Networks Inc	Technology	92	R.J. Reynolds Vapor Co	Retail / Consumer
43	Netflix Inc	Media / Entertainment	93	AT&T Service Inc	Telecom
44	HP Inc	Technology	94	Dr. Reddy's Laboratories Ltd	Pharma / Medical
45	Medtronic Inc	Healthcare Devices	95	NetApp Inc	Technology
46	Palo Alto Networks Inc	Technology	96	Par Pharmaceutical Inc	Pharma / Medical
47	Oracle Corp	Technology	97	Teva Pharmaceutical Industries Ltd	Pharma / Medical
48	BMW of North America LLC	Auto / Industrial	98	Toshiba America Inc	Technology
49	General Electric Co	Industrial	99	Xilinx Inc	Semiconductors
50	Samsung Telecommunications America LLC	Semiconductors	100	Celltrion Inc	Pharma / Medical

### Top 100 Patent Owners

Rank	Patent Owner	Industry	Rank	Patent Owner	Industry
1	Intellectual Ventures II LLC	PAE / Licensing	51	VLSI Technology LLC	PAE / Licensing
2	Uniloc 2017 LLC	PAE / Licensing	52	Webroot Inc	Technology
3	Zond Inc	PAE / Licensing	53	IPA Technologies Inc	PAE / Licensing
4	Rovi Guides Inc	PAE / Licensing	54	Michigan Motor Technologies LLC	PAE / Licensing
5	Maxell Corp	Technology	55	Cellular Communications Equipment LLC	PAE / Licensing
6	Intellectual Ventures I LLC	PAE / Licensing	56	Proxense LLC	PAE / Licensing
7	Uniloc Luxembourg SA	PAE / Licensing	57	Realtime Adaptive Streaming LLC	PAE / Licensing
8	Telefonaktiebolaget LM Ericsson	Telecom	58	Fundamental Innovation Systems International LLC	PAE / Licensing
9	Godo Kaisha IP Bridge 1	PAE / Licensing	59	Mullen Industries LLC	PAE / Licensing
10	Netlist Inc	Semiconductors	60	Personalized Media Communications LLC	PAE / Licensing
11	Genentech Inc	Pharma / Medical	61	Scramoge Technology Ltd	PAE / Licensing
12	Magna Electronics Inc	Auto / Industrial	62	VoIP-Pal.com Inc	PAE / Licensing
13	Jawbone Innovations LLC	PAE / Licensing	63	Fractus SA	PAE / Licensing
14	Uniloc USA Inc	PAE / Licensing	64	United Technologies Corp	Auto / Industrial
15	VirnetX Inc	PAE / Licensing	65	Universal Electronics Inc	Technology
16	Fontem Holdings 1 BV	PAE / Licensing	66	International Business Machines Corp	Technology
17	Finjan Inc	PAE / Licensing	67	Bonutti Research Inc	PAE / Licensing
18	Innovative Display Technologies LLC	PAE / Licensing	68	Intent IQ LLC	PAE / Licensing
19	Koninklijke Philips NV	Technology	69	3Shape AS	Healthcare Devices
20	Realtime Data LLC	PAE / Licensing	70	Dish Technologies LLC	Media / Entertainment
21	Seven Networks LLC	PAE / Licensing	71	Koninklijke KPN NV	Telecom
22	Almondnet Inc	PAE / Licensing	72	Clouding IP LLC	PAE / Licensing
23	Masimo Corp	Healthcare Devices	73	Express Mobile Inc	PAE / Licensing
24	WSOU Investments LLC	PAE / Licensing	74	Mobile Telecommunications Technologies LLC	PAE / Licensing
25	Qualcomm Inc	Semiconductors	75	ParkerVision Inc	PAE / Licensing
26	Immersion Corp	Technology	76	Regeneron Pharmaceuticals Inc	Pharma / Medical
27	Nokia Technologies Oy	Telecom	77	BTL Healthcare Technologies AS	Healthcare Devices
28	United Services Automobile Association	Financial Services	78	Daedalus Prime LLC	PAE / Licensing
29	Greenthread LLC	PAE / Licensing	79	Acqis LLC	PAE / Licensing
30	Papst Licensing GmbH & Co KG	PAE / Licensing	80	Chrimar Systems Inc	PAE / Licensing
31	Smartflash LLC	PAE / Licensing	81	Dali Wireless Inc	Telecom
32	BlackBerry Ltd	Technology	82	Electronics & Telecommunications Research Institute	Research
33	Gree Inc	Media / Entertainment	83	Energetiq Technology Inc	Energy
34	Nike Inc	Retail / Consumer	84	Parus Holdings Inc	PAE / Licensing
35	Paice LLC	PAE / Licensing	85	ResMed Corp	Healthcare Devices
36	The Abell Foundation Inc	PAE / Licensing	86	Schlumberger Technology Corp	Energy
37	TQ Delta LLC	PAE / Licensing	87	Bio-Rad Laboratories Inc	Pharma / Medical
38	Headwater Research LLC	PAE / Licensing	88	E-Watch Inc	PAE / Licensing
39	Agis Software Development LLC	PAE / Licensing	89	Monterey Research LLC	PAE / Licensing
40	Allergan Inc	Pharma / Medical	90	Securus Technologies Inc	Telecom
41	American Vehicular Sciences LLC	PAE / Licensing	91	Straight Path IP Group Inc	PAE / Licensing
42	Centripetal Networks Inc	Technology	92	Tracbeam LLC	PAE / Licensing
43	Contentguard Holdings Inc	PAE / Licensing	93	US Well Services LLC	Energy
44	Entropic Communications LLC	PAE / Licensing	94	Apple Inc	Technology
45	Alacritech Inc	PAE / Licensing	95	Invue Security Products Inc	Technology
46	Huawei Technologies Co Ltd	Telecom	96	Jazz Pharmaceuticals Inc	Pharma / Medical
47	Open Text Inc	Technology	97	Lone Star Silicon Innovations LLC	PAE / Licensing
48	Neodron Ltd	PAE / Licensing	98	Sound View Innovations LLC	PAE / Licensing
49	Align Technology Inc	Healthcare Devices	99	Universal Secure Registry LLC	PAE / Licensing
50	Bell Northern Research LLC	PAE / Licensing	100	Apex Beam Technologies LLC	PAE / Licensing