



# AST Patent Deals Report

## Market Trends & Insights Q2 2023

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## Methodology

AST tracks US Patent and Trademark Office (USPTO) patent assignment records and gathers data from many public sources. On occasion, US assets are reassigned between parties for different purposes. We analyze assignment activity using our proprietary methodology and probe each assignment record for pertinent business intelligence, including the involved parties, business types, industries, and technologies.

This report highlights activity in the patent deals market taking place during the second quarter of 2023. We define a “patent deal” as an exchange of assets (including patents and published applications) between parties during a set timeframe. Each deal may include multiple assets and multiple reel/frame numbers.<sup>1</sup>

We have analyzed over 30,780 USPTO assignments involving 113,182 US assets with 667 sale assignments, recorded from April 1 to June 30, 2023.

*Data with USPTO updated date, including June 30, 2023, are considered in this report.*

### Categories used in this report:

- Automotive & Transport (Auto)
- Communication (Comm)
- Computing Systems (Comp)
- Electronics (Elec)
- Healthcare & Pharma (H&P)
- Industrial (Ind)
- Lighting (Lig)
- Media
- Other (Oth)
- Semiconductor (Semic)
- Software (SW)
- Wireless (WL)

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<sup>1</sup> The USPTO keeps a record of each asset exchange by assignment reel and frame number.

# Executive Summary

In the second quarter of 2023, the US Patent and Trademark Office (USPTO) registered 433 patent transactions encompassing 11,356 assets, between 409 sellers and 403 buyers.

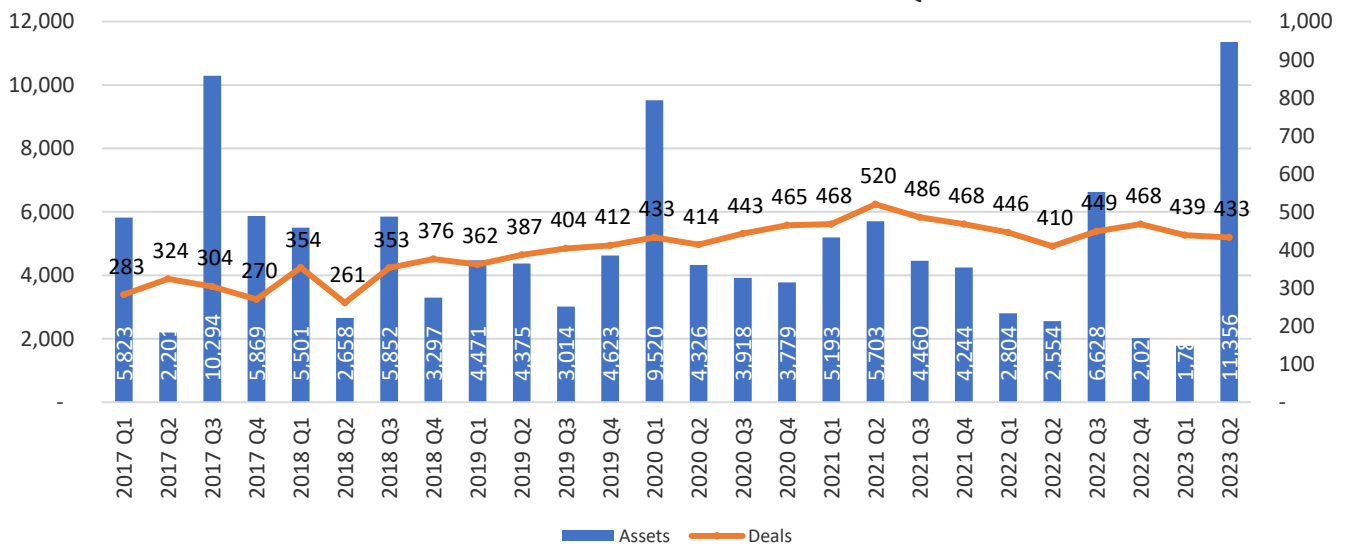
During this same period, the second quarter of 2023 exhibited several positive economic indicators, including robust employment figures, healthy revenue generation, and a notable increase in corporate profits. Despite a mixture of positive signs, there was a reduction in corporate investment in research and development activities. However, the secondary market for patent transactions demonstrated improvement when compared to the first quarter of 2023. As anticipated, there was a noteworthy surge in acquisitions by new Non-Practicing Entities (NPEs), potentially leading to increased litigation in the future.

Due to a lag in assignment record processing at the USPTO, 15% of deals from the first quarter were only officially recorded in the second quarter of 2023. Consequently, the number of deals reported for the first quarter of 2023 has been revised upward to 439, and the volume of transacted assets has been adjusted from 1,671 to 1,781. Considering the historical trend of delayed assignment information over the past few quarters, it is foreseeable that the actual number of transactions recorded in the second quarter of 2023 will see further increases in subsequent quarters.

A few key observations in this quarter:

<p><b>88%</b> Transacted assets bought by NPEs</p>	<p><b>11,356</b> Assets changed hands in Q2 2023</p>	<p><b>88%</b> of assets were related to Wireless</p>	<p>Out of 31 NPE buyers, <b>35%</b> were 1<sup>st</sup> time buyers</p>
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- Number of Deals and Assets For Recent Quarters -



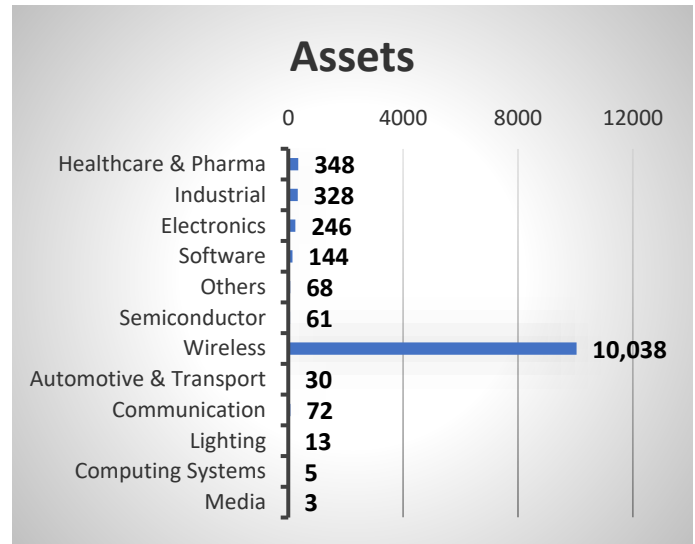
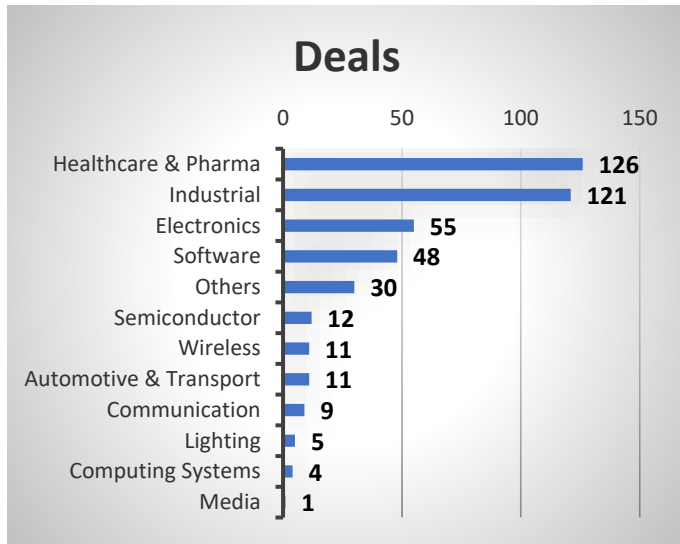
### **Important Observations in Q2 2023:**

- **NPE-Key Patent Innovations Ltd** bought 9,702 assets from **BlackBerry** related to Wireless assets.
- **NPE-Rampwerks LLC** bought 11 Industrial assets from **Wick Werks LLC** and filed 1 litigation against **AbsoluteBLACK** after 4 days of deal record date.
- **11 new NPEs** bought **149 assets** related to Automotive & Transport, Electronics, Industrial, Software, Semiconductor and Wireless domains.
  - **NPE-Optimorphix Inc** bought 58 Wireless assets from another **NPE-ByteMobile Innovations LLC** which is affiliated with **Adapt IP Ventures LLC**
  - **NPE-Advanced Standard Communication LLC** bought 42 Wireless assets from **ZTE Corp**
  - **NPE-Rampwerks LLC** bought 11 Industrial assets from **Wick Werks LLC**
  - **NPE-Autonavigare LLC** bought 10 assets related to Automotive & Transport from **FORVIA Faurecia**
  - **NPE-Semiled Innovations LLC** bought 8 Semiconductor assets from another **NPE-Smart Handover LLC**
  - **NPE-I3 Technology Management Ltd** bought 6 Software assets from **Get It First Inc**
  - **NPE-Geosymm Ventures LLC** bought 5 Software assets from **Allied Security Trust**
  - **NPE-Edge Networking Systems LLC** bought 4 Wireless assets from **Taaghoh, Pouya**
  - **NPE-Northwest IP LLC** bought 3 Industrial and Electronics assets from multiple sellers
  - **NPE-Greek Patents Mike** bought 1 Industrial asset from **Mpiliias Panagiotis Single Member Pvt Co**
  - **NPE-Takahashi, Hayashi and Partner Patent Attorneys Inc** bought 1 Electronics asset from **Jin Young Global Co Ltd**
- There have been **8 deals** involving **17 assets** that subsequently resulted in **30 litigations** targeting **30 Operating Companies**, which include **AbsoluteBLACK, BBK Electronics, Fossil Group Inc, Honeywell International Inc, HPE, Johnson & Johnson, LG, Microsoft, Philips, Samsung, Siemens AG, Stryker Corp, Texas Instruments Inc**, and others.
- The 17 assets at the center of these legal actions are primarily associated with key industries, including Semiconductor (4), Wireless (4), Automotive & Transport (4), Industrial (3), Healthcare & Pharma (1) and Software (1).
- A total of 85 reassignments linked to 74 deals, originally recorded in Q1 2023, remained absent from USPTO records until Q2 2023. Consequently, the tally of deals officially **recorded in Q1 2023 has been revised upward to 439.**

## Assets and Deals by Industry Category

AST utilizes a comprehensive analysis of the asset's title, technology area, class codes, and sellers/buyers' industry domains to assign an industry category for each deal. In the second quarter of 2023, a total of 433 deals were recorded, with 88 percent of all transacted assets in Wireless and 3 percent in Electronics and Software.

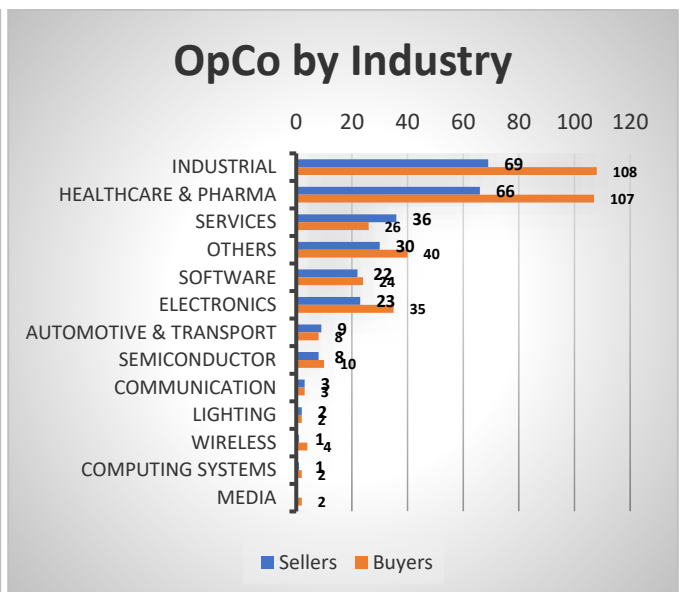
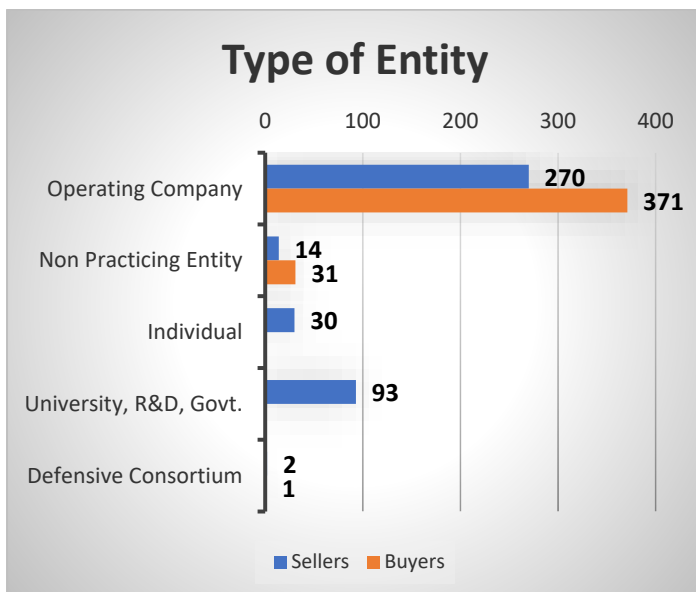
High-tech domains, such as Communication, Computing Systems, Electronics, Lighting, Semiconductor, Software and Wireless, accounted for 93% of total transacted assets.



## Sellers and Buyers by Entity Type and Industry

In this quarter, Semiconductor companies, such as ON Semiconductor, AMD, Seoul Semiconductor Co Ltd, J-Metrics Technology Co Ltd, Siglead Inc, Wuxi Petabyte Technologies Co Ltd, sold 192 assets in 8 deals.

Electronics companies, such as Fujitsu Ltd, Hannstar Display Corp, Hikvision Digital Technology Co Ltd, Hitachi Ltd, Huawei, Samsung and Sennheiser Electronic, actively bought 191 assets in 36 deals.



## The Top Deals

- **NPE-Key Patent Innovations Ltd** acquired 9,702 Wireless-related assets from **BlackBerry**, with **Ocean Tomo LLC** acting as the broker for **BlackBerry**.
- **ON Semiconductor Corp** sold 160 Wireless-related assets to **MaxLinear Inc**.
- **Merck & Co** sold 81 Industrial-related assets to **Universal Display Corp**.
- Among the top **20** deals, **22 litigations** were filed using **55** assets against **Avaya, BlackBerry, CommScope, Dell, Ericsson, Infineon Technologies, Meta, Nokia, Snap, Twitter, and Verizon**.
- **Two new NPE** buyers filed three litigations against **Kichler Lighting LLC, WW Grainger Inc** and **AbsoluteBLACK** using 7 assets.
  - **NPE-Adapt IP Ventures LLC** sold 58 Wireless assets to another **NPE-Optimorphix Inc**
  - **ZTE Corp** sold 42 Wireless assets to **NPE-Advanced Standard Communication LLC**
  - **Bracco Group** sold 39 Healthcare & Pharma assets to **Edwards Lifesciences Corp**
  - **Nikon Corp** sold 39 Electronics assets to **Hitachi Ltd**

**88%**  
Assets bought in  
Top 5 Deals

*Key Observation: In the second quarter of 2023, a notable trend emerged with NPEs accounting for a significant 88% of all purchased assets, with the vast majority (98%) being related to Wireless technology. Additionally, new NPEs entered the market and acquired 1% of all assets. The continued acquisition of assets by NPEs may potentially lead to increased litigations in the upcoming quarters.*

Rank	Seller	Buyer	Assets	Industry Category <sup>2</sup>
1	BlackBerry	<i>Key Patent Innovations Ltd</i>	9,702	WL
2	ON Semiconductor Corp	MaxLinear Inc	160	WL
3	Merck & Co	Universal Display Corp	81	Ind
4	<i>Adapt IP Ventures LLC</i>	<i>Optimorphix Inc</i>	58	WL
5	ZTE Corp	<i>Advanced Standard Communication LLC</i>	42	WL
For complete list with all details for the following deals, please contact <a href="#">Ray Strimaitis</a>				
6	Operating Company	Operating Company	39	Elec
7	Operating Company	Operating Company	39	H&P
8	Operating Company	Operating Company	37	Elec
9	<i>NPE</i>	Operating Company	36	WL
10	Operating Company	Operating Company	31	Elec
11	Operating Company	<i>NPE</i>	26	WL
12	Operating Company	Operating Company	23	Elec
13	Operating Company	<i>NPE</i>	23	Comm
14	Operating Company	Operating Company	22	H&P
15	<i>NPE</i>	Operating Company	22	SW
16	Operating Company	Operating Company	20	Ind
17	Operating Company	Operating Company	18	Ind

<sup>2</sup> Industry category is based on AST analysis of transacted assets.

Rank	Seller	Buyer	Assets	Industry Category <sup>2</sup>
18	Operating Company	Operating Company	15	H&P
19	Operating Company	Operating Company	14	Oth
20	Operating Company	Operating Company	13	SW
<i>NPEs are highlighted</i>				

## Worth Noting


These deals are worth noting because (a) they involved high-profile companies, which may indicate a change of technology focus for a particular company; or (b) they involved NPEs, which could indicate a potential litigation risk.

- **NPE-Digital Keystone Inc** sold a portfolio of 10 Communication assets to another **NPE-Videolabs Inc**. *All assets were received by AST.*
- **NPE-Autonavigare LLC** acquired 10 assets related to Automotive & Transport from **FORVIA Faurecia**. *8 assets were received by AST.*
- **NPE-Semiled Innovations LLC** acquired 8 assets related to Semiconductor from another **NPE-Smart Handover LLC**. *5 assets were received by AST.*

## Top Sellers (Number of Deals)

- During this quarter, a total of 271 Operating Companies sold 10,461 assets across 275 deals, while 15 NPEs sold 2,189 assets through 17 deals.

**63%**  
Deals involved  
OpCo sellers

Rank	Seller	Deals 	Assets	Industry Category <sup>3</sup>
1	Chinese Academy of Sciences	4	7	Ind (3), H&P (1)
2	ZTE Corp	3	72	WL (2), Comm (1)
3	National Taiwan University	3	7	H&P (2), SW (1)
4	<i>Pathunt IP Management Ltd</i>	2	23	SW (2)
5	University of Cambridge	2	19	SW (1), Elec (1)
For complete list with all details for the following deals, please contact <a href="#">Ray Strimaitis</a>				
6	Operating Company	2	16	H&P (2)
7	Operating Company	2	8	SW (2)
8	Operating Company	2	8	Elec (1), SW (1)
9	<i>NPE</i>	2	8	WL (1), SW (1)
10	Operating Company	2	6	Semic (1), Ind (1)
11	Operating Company	2	4	Elec (1), H&P (1)
12	Others	407	11,178	Mixed
<i>NPEs are highlighted</i>				

### Worth Noting

- NPE-Patent Armory Inc** acquired 37 assets in 4 deals from 2 OpCos and 2 individuals.
- NPE-Jeffrey M Gross** acquired 12 assets in 4 deals from 2 NPEs and one OpCo.

<sup>3</sup> Industry category is based on AST analysis of transacted assets.

## Top Buyers (Number of Deals)

- In this quarter, Operating Companies participated in 393 deals, making an increase from the 324 deals they were involved in during the previous quarter.

Rank	Buyer	Deals ↓	Assets	Industry Category <sup>4</sup>
1	Siemens	8	8	Ind (5), SW (2), H&P (1)
3	<i>Patent Armory Inc</i>	4	37	SW (2), Comm (2)
2	<i>Jeffrey M Gross</i>	4	12	SW (2), WL (1), Comm (1)
3	Precision Pharmaceuticals Pty Ltd	3	13	H&P (2), Oth (1)
4	Roche	3	9	H&P (3)
5	Tesco The Eastern Speciality Co	3	6	Elec (2), Ind (1)
For complete list with all details for the following deals, please contact <a href="#">Ray Strimaitis</a>				
6	Operating Company	3	4	Ind (3)
7	<i>NPE</i>	3	3	Ind (2), Elec (1)
8	Operating Company	2	40	H&P (2)
9	Operating Company	2	38	WL (2)
10	Operating Company	2	10	Ind (2)
11	Others	396	11,176	Mixed
<i>NPEs are highlighted</i>				

### Worth Noting

- NPE-Aequitas Technologies LLC** bought 7 assets related to Healthcare & Pharma from **The California Institute of Computer-Assisted Surgery**
- NPE-Piece Future Pte Ltd** bought 5 assets related to Software from **Panasonic**
- NPE-Dynamic IP Deals LLC** bought 1 asset related to Wireless from another **NPE-Proudlion IT Ltd**. Asset was received by AST.

<sup>4</sup> Industry category is based on manual analysis.

## Report Sections available to AST Members only

To become an AST member, please contact [Ray Strimaitis](mailto:ray@ast.com)

**Top Sellers (Number of Assets)**

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**Top Buyers (Number of Assets)**

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**Top Deals Based on Assets Received by AST**

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**Prior Deals Reported This Quarter**

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**Excluded Potential Patent Sale Deals**

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**Mergers and Acquisitions–Related Assignments**

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**License-Related Assignments**

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**Failed Patent Sales—Highlights**

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**Patent Transaction News—Highlights**

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**Deal Database in EXCEL with ALL Transactions Details and Patent Numbers**

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