

# Retail & eCommerce Patent Threats & Litigation Continues at High Levels: Insights & Key Findings

September 2022

## Retail & eCommerce Litigation

*"Growth in eCommerce has changed the way that retail businesses operate. Retailers employ Open Source Software (OSS) to deliver their services, as well as meet customer expectations in today's digital world. It is also clear that E-commerce is an active area for PAE patent assertion and litigation activity. Open Invention Network has, and will, continue investing in programs and activities to hinder PAE actions associated with core OSS that Retailers and eCommerce companies rely upon."*

— Keith Bergelt  
CEO



# Background

- ❖ Established in 2005, OIN exists to reduce threats of license and patent infringement cases against Open Source Software (OSS) through its royalty-free, cross-license network
- ❖ Over 50 Retail & eCommerce companies are OIN members, including Best Buy, Costco, Estée Lauder, Etsy, Shopify and Target
- ❖ eCommerce is the most frequent target for PAE patent litigation activity, and it continues growing.
- ❖ Unified Patents — with subscriptions from OIN, IBM, the Linux Foundation & Microsoft — launched an Open Source Zone in 2019 to deter Non-Practicing Entities (NPEs) from monetizing poor quality patents

# Defendants Added to Litigations by NPEs, Case Numbers and Percent Change from 2020 to 2021

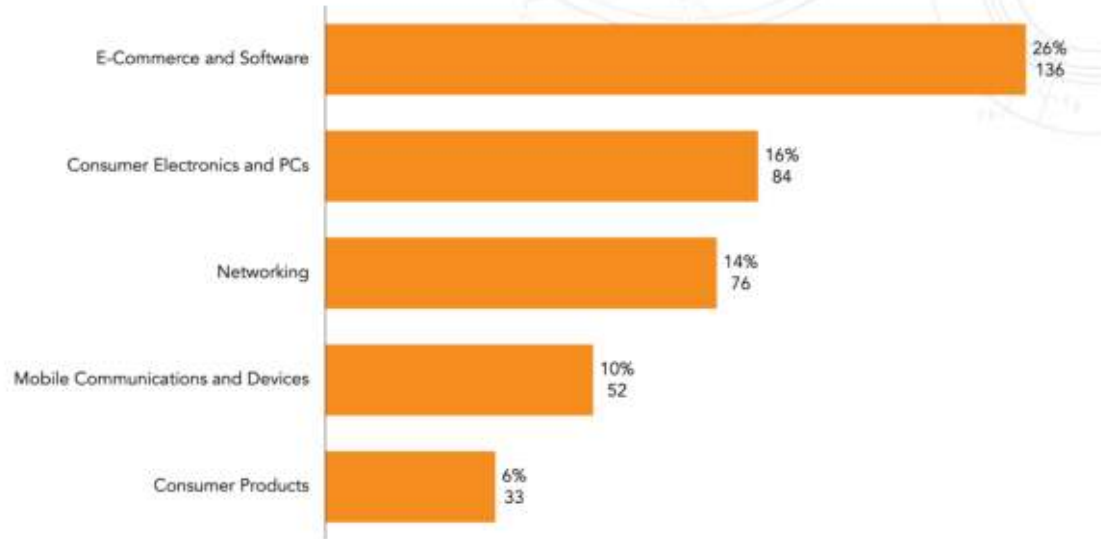
Source: "Q4 in Review: Financial Services Litigation Doubles in 2021", RPX Insight, January 21, 2022

		2020	2021
Automotive	3%	89	92
Biotech & Pharma	-50%	18	9
Consumer Electronics & PCs	24%	297	368
Consumer Products	3%	73	75
<b>eCommerce &amp; Software</b>	9%	<b>572</b>	<b>624</b>
Financial Services	100%	71	142
Industrial	-42%	43	25
Media Content & Distribution	30%	97	126
Medical	-10%	39	35
Mobile Communications & Devices	35%	117	158
Network	-11%	486	432
Other Sectors	24%	85	105
Semiconductors	-1%	148	147

# Q1 2022 NPE Activity in eCommerce

Source: "E-Commerce and Software Saw the Most NPE Activity in Q1 2022, with Familiar Plaintiffs and Patents", RPX Insight, May 22, 2022

Top NPE Market Sectors in Q1 2022 (Defendants Added)



Notable PAE plaintiffs in

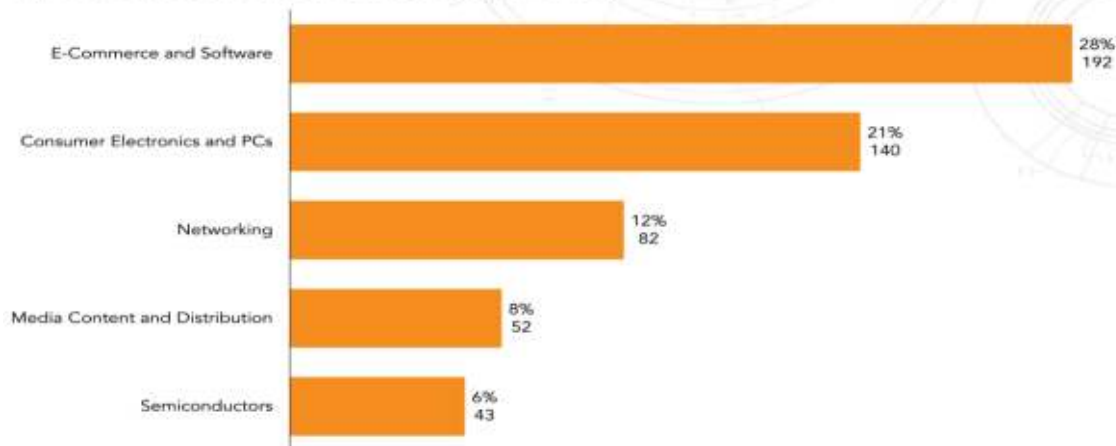
Ecommerce and Software were:

- ❖ Advanced Transactions, LLC and Alto Dynamics, LLC, with ties to patent monetization firm IPInvestments Group.
- ❖ IP Edge LLC, via Savannah Licensing LLC and IP Edge via Bassfield IP LLC.
- ❖ Dynamic IP Deals, LLC (d/b/a DynalP), filed separately through AK Meeting IP LLC and Silent Communication, LLC.

## Q2 2022 NPE Activity in eCommerce

Source: "E-Commerce and Software Saw the Most NPE Litigation in Q2", RPX Insight, August 17, 2022

Top NPE Market Sectors in Q2 2022 (Defendants Added)



Notable PAE plaintiffs in eCommerce and Software were:

- ❖ Acacia subsidiary R2 Solutions, LLC filed suits targeting search query processing and analytics
- ❖ Lexos Media IP, LLC filed against eCommerce websites with image zoom
- ❖ Caddo and 511 Technologies filed against websites with hierarchical/nested menus

# Select Retail & eCommerce Litigation 2020-2021

Given the amount of PAE activity in Retail & eCommerce (624 cases in 2021 alone), it is impossible to list all the litigation. The list below is a select list and indicative.

09/28/20

**Proxense**

(Proxense)



Mobile App Sync

10/05/20

**Kiobi Processing**

(IP Investment Group)



Secure Transactions

12/03/20

**AML IP**

(Dynamic IP Deals)



Electronic Tokens

12/15 – 12/30/20

**AML IP**

(Dynamic IP Deals)



E-Commerce



Electronic Tokens

1/8/21, 1/30/21

**William Grecia**

(William Grecia)



Mobile payment

1/29/21

**Target Group**

(R2 Solutions, LLC)



eCommerce

01/29/21

**Walmart Inc.**

(R2 Solutions, LLC)



eCommerce

3/30/21

**William Grecia**

(William Grecia)



Authentication

4/27/21

**AML IP**

(Dynamic IP Deals)



NORDSTROM

Electronic tokens, eCommerce

4/30/21

**Karatek Holdings**

(IP Edge)



Multi-factor authentication

04/28/22

**CVS Health Corp.**

(R2 Solutions, LLC)



eCommerce

# Key Findings

- ❖ eCommerce sales surged during the pandemic increasing \$244.2B (43%) in 2020, making this an increasingly rich market for PAEs to target.
  - Total U.S. eCommerce sales \$815.4B (2020) / \$571.2B (2019)
- ❖ Of the sectors tracked by RPX, Ecommerce & Software had the most patent litigation activity in 2021, with 624 cases. Ecommerce & Software was also the most active sector in the Q1 (136 cases) and Q2 (192 cases) of 2022, according to RPX.
- ❖ Non-Practicing Entities (NPEs) Open Source patent litigation has reached 617 cases through June 2022 and is on track for ~1,200 this year, doubling the number of cases in 2022 over 2021.
- ❖ NPEs have started suing Open Source projects and creators for patent infringement on overbroad software patents that likely never should have been issued.



# Key Findings

- ❖ Retailers around the world use Open Source to reduce costs, foster innovation and reduce exposure to risk
- ❖ Common Open Source technologies for the Retail & eCommerce industry, which PAEs may be targeting, include but are not limited to those listed below:
  - Drupal, Magento and WordPress — Website & Mobile
  - ReactJS and VueJS — Online interfaces
  - OSPOS and SambaPOS — Point-of-Sale terminals
  - MongoDB and PostgreSQL — Databased Management Systems
  - Spark, ActiveMQ and Kafka — Middleware Software
  - Hadoop, PyTorch and TensorFlow — Data Insights & Analytics
- ❖ Other technologies targeted by PAEs include, but are not limited to:
  - Linux Kernel, OpenStack, CephFS and Docker

# OIN vs Patent Assertion Entities

Established in 2005, OIN is the world's largest patent non-aggression community and free defensive patent pool. We protect and defend our members from patent risks in Open Source, reduce patent threats and mitigate patent litigation related to core Open Source technologies.

- ❖ We actively monitor the marketplace for patent-related threats to Linux & adjacent Open Source technologies and challenge patents and patent applications as appropriate
- ❖ We founded Unified Patents Open Source Software (OSS) Zone to further protect OSS from PAEs leveraging low-quality patents & targeting Linux & OSS technologies
- ❖ We manage an aggressive Pre-Issuance Submission Program focused on securing rejections of overly-broad patent applications in Open Source Software, reducing the claim scope & challenging patent applications as appropriate
- ❖ We provide or help secure prior art for member companies at risk, or in litigation, from operating companies & PAEs seeking to use OSS-related patents to collect money
- ❖ We promote and educate the Open Source community on complementary defensive IP strategies such as LoT and RPX and support key Open Source projects with our efforts

# A Sampling of OIN Retail & eCommerce Community Members

mercari



ESTÉE LAUDER



FOSSIL



Etsy

Rakuten



# Contributing Companies

**Open Invention Network** (OIN) is the largest patent non-aggression community in history and supports freedom of action in Linux as a key element of Open Source Software (OSS). Patent non-aggression in core technologies is a cultural norm within OSS, so the litmus test for authentic behavior in the OSS community includes OIN membership. Funded by Google, IBM, NEC, Philips, Sony, SUSE, and Toyota, OIN has over 3,600 community members. The OIN patent license and member cross-licenses are available royalty-free to any party that joins the OIN community.

**RPX** provides a rational alternative to litigation. The San Francisco-based company's pioneering approach combines principal capital, deep patent expertise, and client contributions to generate enhanced patent buying power. By acquiring patents and patent rights, RPX helps to mitigate and manage patent risk for its growing client network.

**Unified Patents** is an international organization of over 200 businesses which together, take an aggressive stance to deter patent abuse in defined technology sectors, known as zones. Its actions are focused in zones with substantial assertions by Standards Essential Patents (SEP) holders and/or Non-Practicing Entities (NPE).



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