

Patent war dynamics

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What does the data look like

case_node_id	Case Title	Civil Action #	Venue	Filing Date	included in random sample	DJ	patents	Alleged Infringer	paragraph_id	Patent Asserter	asserter_id	Asserter Category
118525	Williams, et al v. Ger	1:00-cv-00037	E.D.Tex.	2000-01-13	1	0	5655545	Tyco International, L	4015	Randy Williams	97476	9
118525	Williams, et al v. Ger	1:00-cv-00037	E.D.Tex.	2000-01-13	1	0	5655545	Tyco International, L	4016	Lana Davis Johnso	80621	9

Patent Asserter
Randy Williams
Lana Davis Johnso

Alleged Infringer
Tyco International, L
Tyco International, L

patents
5655545
5655545

Who

Sues

who

on what

Numbers

~100 000 cases between 2000-2021

Most aggressive suers

Company	Suits Filed
Uniloc USA, Inc.	478
Melvino Technologies Limited	408
ArrivalStar S.A.	406
Uniloc Luxembourg S.A.	401
Pfizer, Inc	309
eDekka LLC	251
Hawk Technology Systems, LLC	230
Symbology Innovations, LLC	230
Novartis Pharmaceuticals Corporation	226
Oakley, Inc.	217

Most sued companies

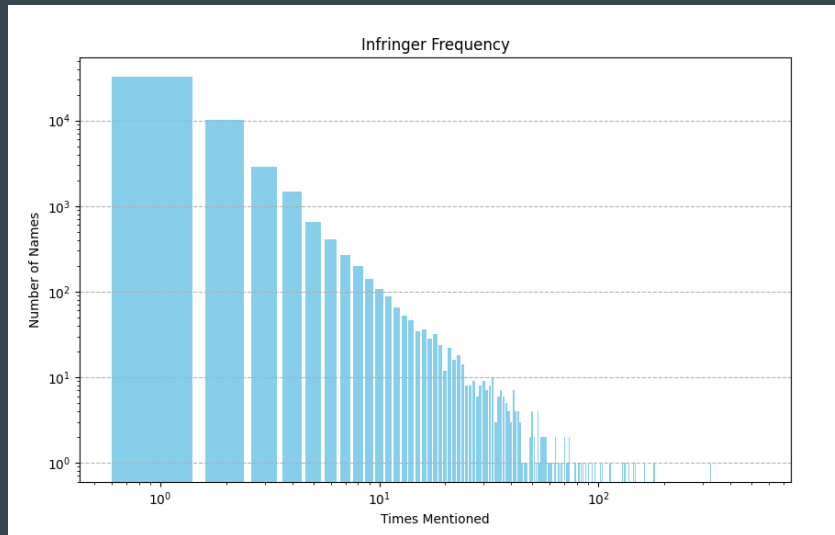
Company	Suits
Apple Inc.	540
Apotex Inc.	456
Sandoz Inc.	406
Microsoft Corporation	360
Dr. Reddy's Laboratories, Inc.; Dr. R...	326
Teva Pharmaceuticals USA, Inc.	298
Lupin Pharmaceuticals, Inc.; Lupin Ltd.	267
Mylan Pharmaceuticals, Inc.; Mylan, Inc.	225
Mylan Pharmaceuticals, Inc.	219
	198

Most names occur few times

Straight line in log-log scale

Implies power-law
distribution

Same distribution for
plaintiffs (suers)



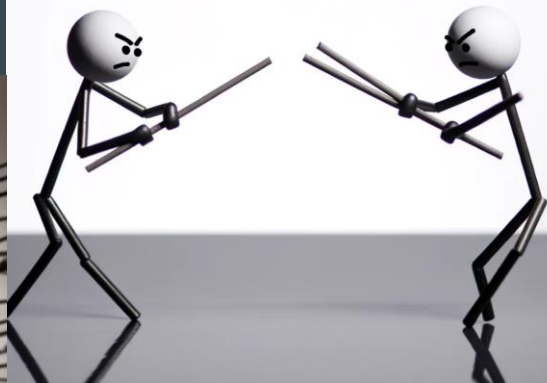
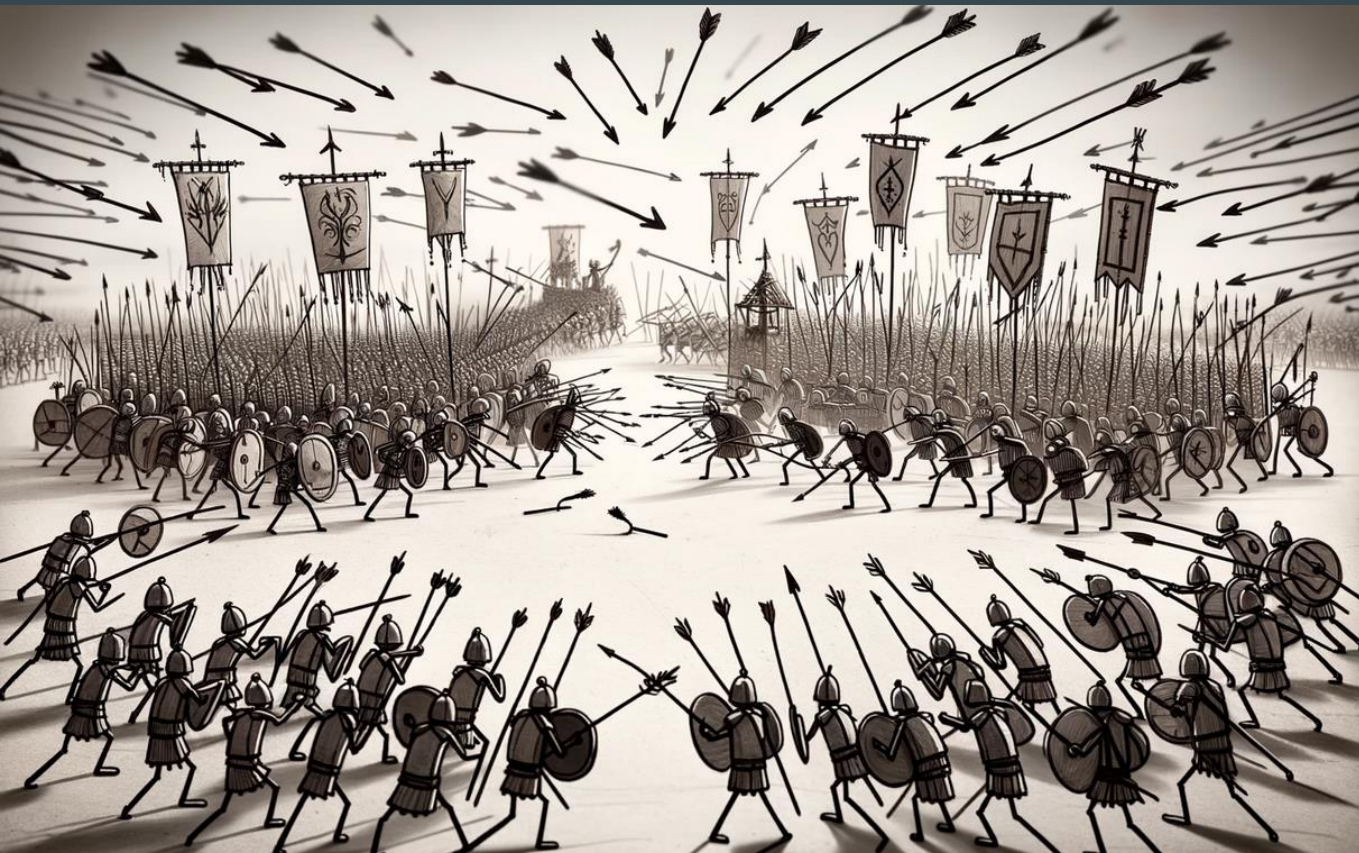
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Alledged Infringer :Samsung Electronics America, Inc.; Samsung Electronics Co., Ltd.  
Patent Asserter    :Scramoge Technology LTD.  
The patents        :10193392; 10199876; 9490652
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What is war

“A state of armed conflict between different countries or different groups within a country.”



What does a war look like



What next

- Build a network

 - Nodes are companies / people

 - Vertices are amount of lawsuits filed

 - Only the most influential?

- Do some themes / patterns emerge

- Later maybe add specific patents as nodes

- Are some patents “war grounds”

Previous work

Innovation and Firm Dynamics with Patent Wars, 2021

A game theory approach to raising a patent lawsuit

Scale-free network analysis of big data for patent litigation cases in the United States, 2017

“This study empirically analyzes the structure and behavior of the patent litigation network in the U.S.”

Thanks!