



TSMC - Curr.Assignee

SourcePatentcloud's Due Diligence 2021-04-20

Patents in the Analysis Scope

There should be 64,937 applications from 27,764 families. In the current Analysis Scope, 64,937 applications were found, with 0 applications missing.

Applications

64,937

Families

27,764

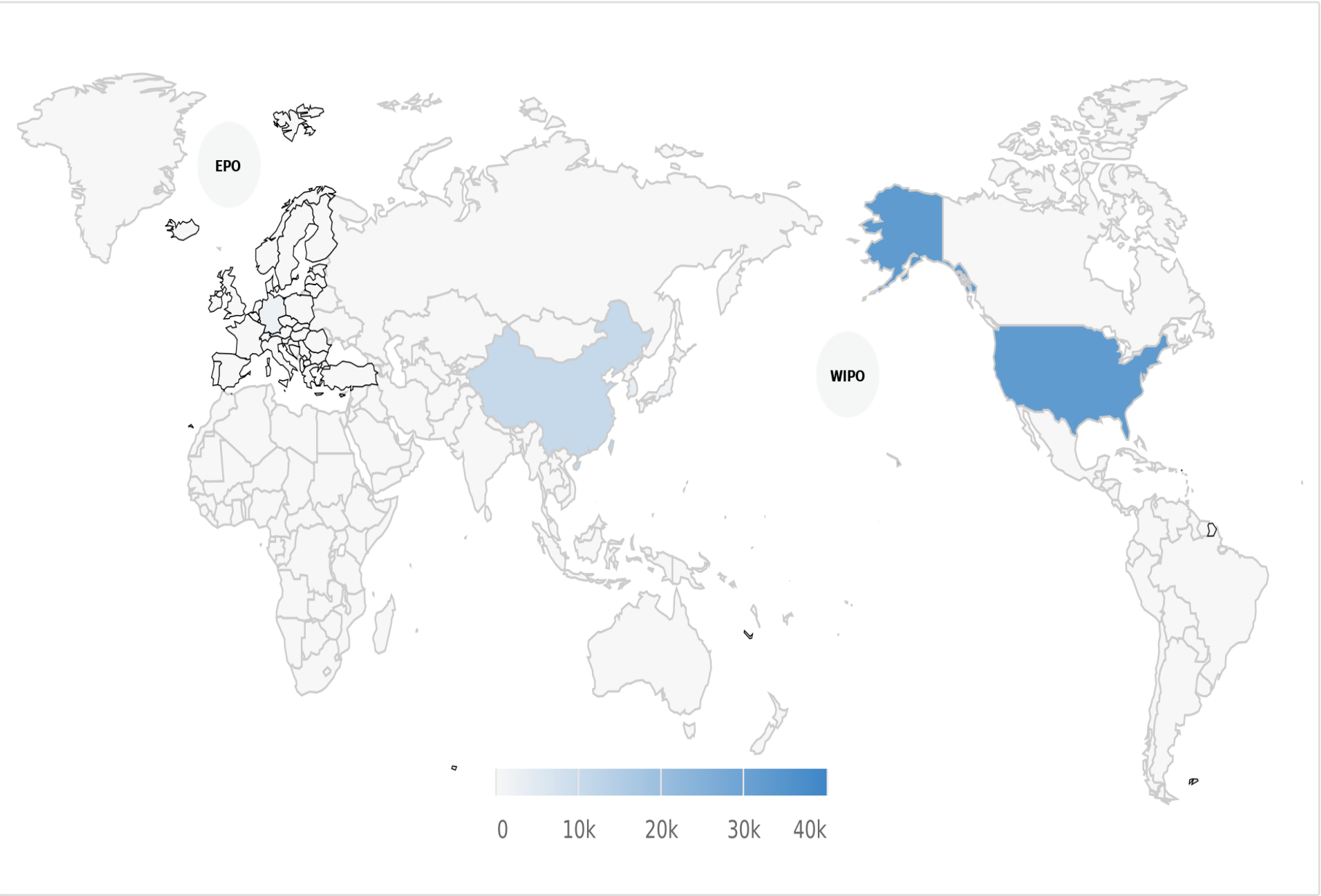
Global Coverage

Establish whether the portfolio covers your target regional market.

Total # of Applications : 64,044; # of Applications in the chart : 64,044

Patents included: Active, Inactive and Pending patents

Country: US(32706) TW(12184) CN(10686) KR(3659) DE(2242) JP(886) EP(471)
WO(435) SG(404) AU(65) NL(52) AT(42) GB(41) CA(31) IN(30) FR(22) HK(17)



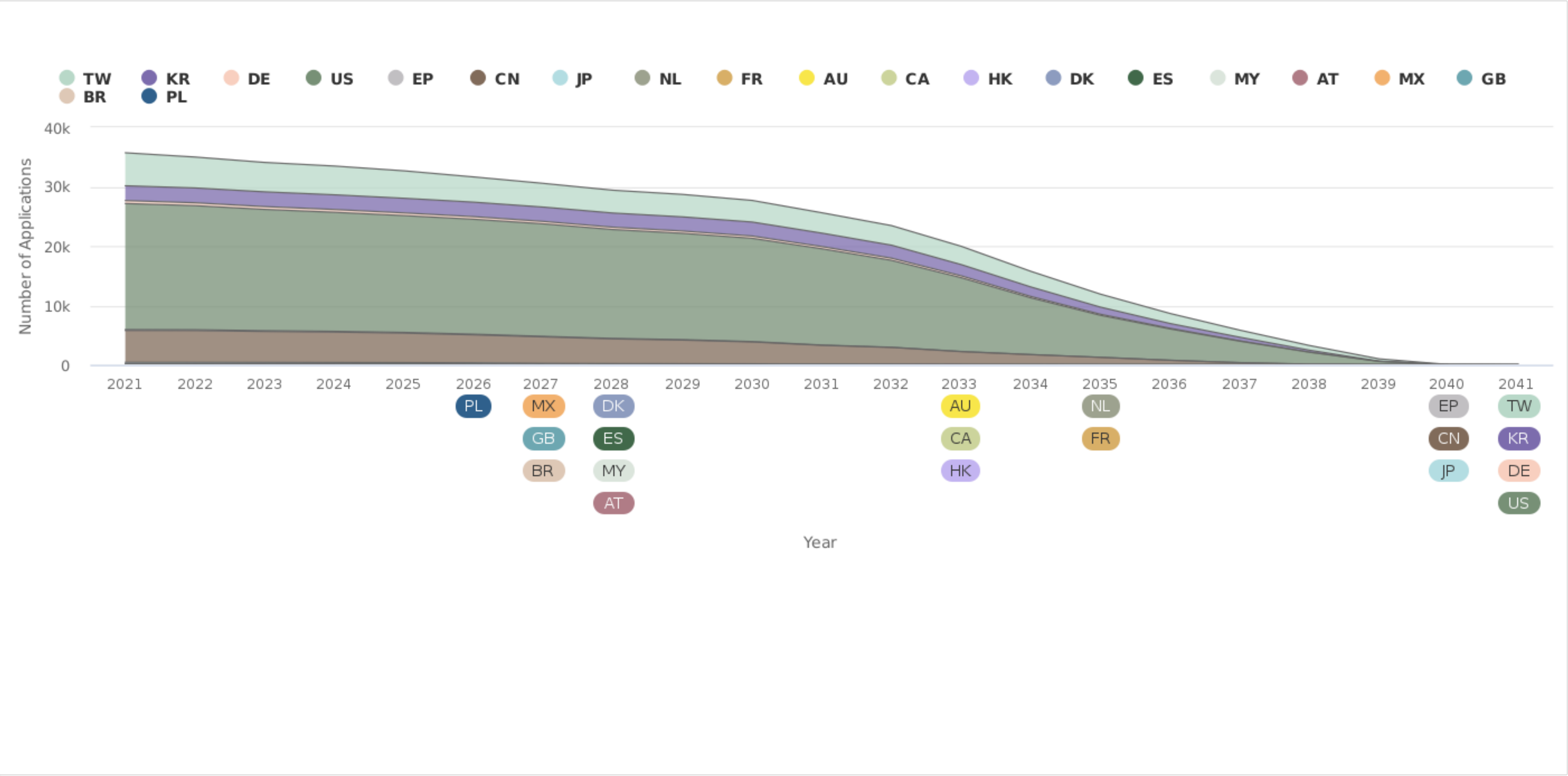
Country	Patent Appl.	Legal Status		
US	32706	21231	4438	7037
TW	12184	5553	1970	4661
CN	10686	5358	3398	1930
KR	3659	2458	540	661
DE	2242	2088	154	
JP	886	10		
EP	471	19		
WO	435	13		
SG	404	14		
AU	65	18		

Active Pending Inactive

Remaining Life (Active Patents Only.)

The remaining life of the active patents in the portfolio.
Total # of Applications : 35,699; # of Applications in the chart : 35,699

Patents included: Active patents

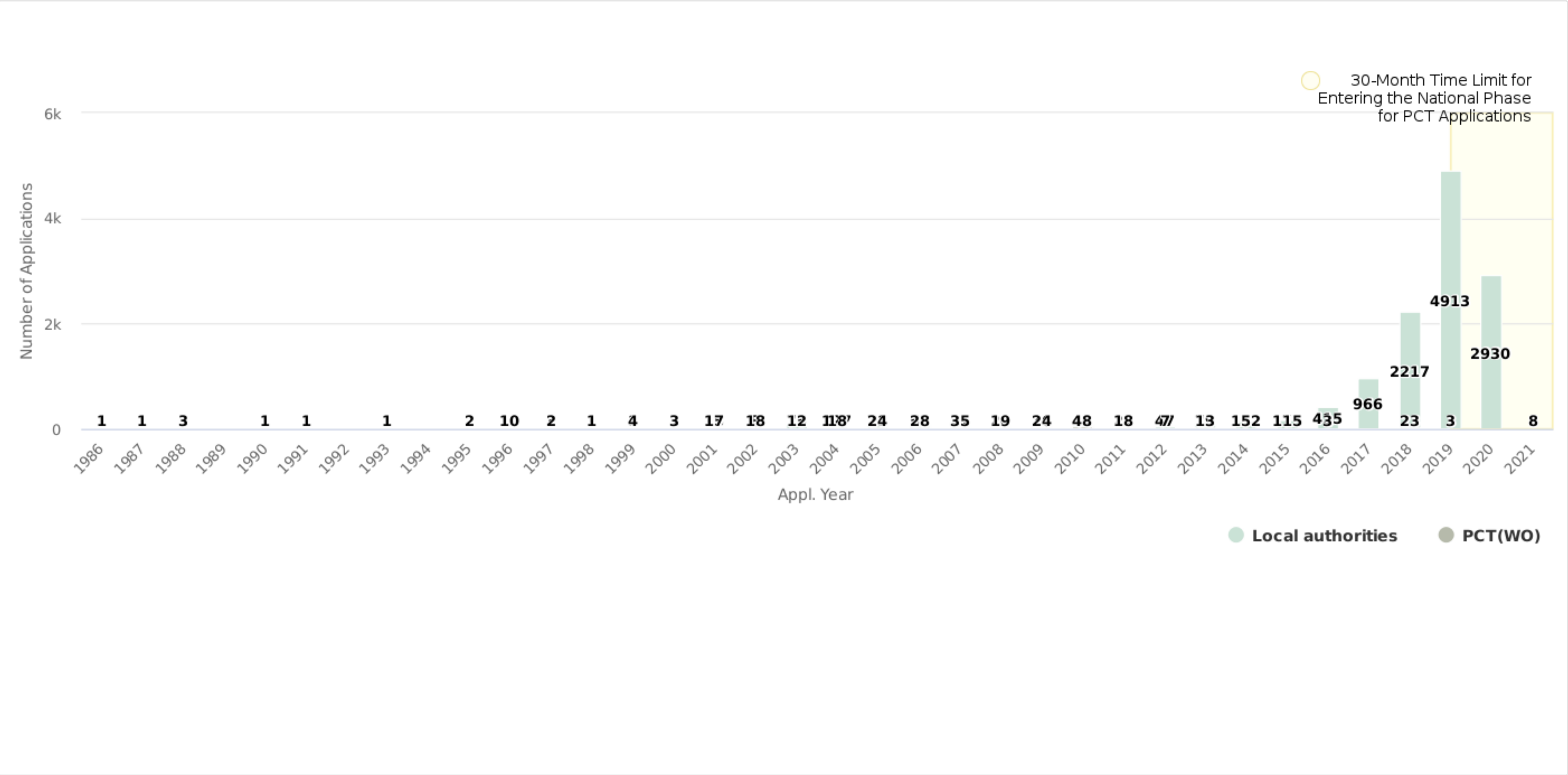


Pending Patents (Pending Patents Only.)

The filing dates of the pending patents.

Total # of Applications : 12,728; # of Applications in the chart : 12,728

Patents included: Pending patents

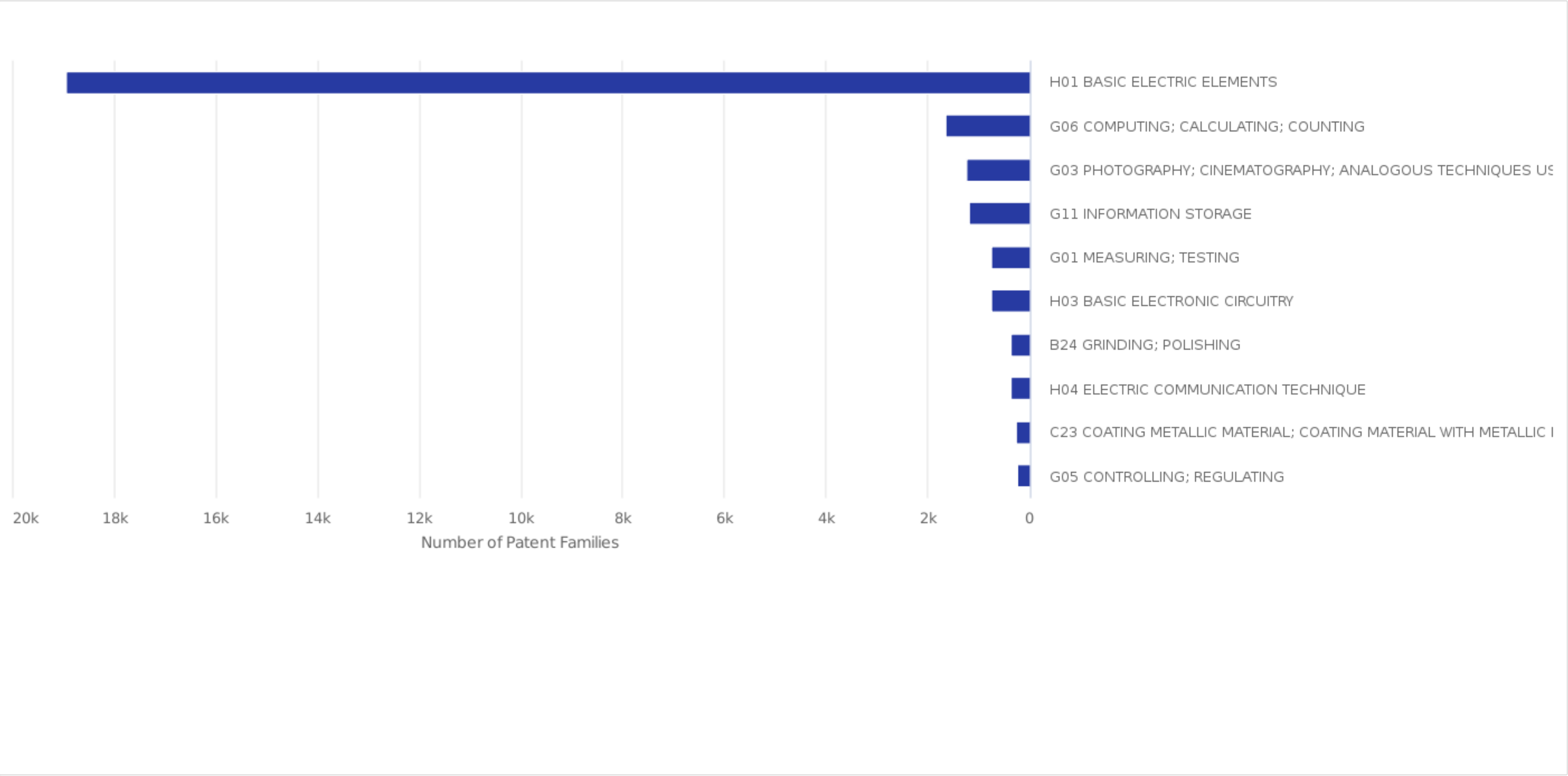


Technical Fields

Hierarchical overview of technology distribution.

Total # of Patent Families : 27,395; # of Patent Families in the chart : 25,669

Patents included: Active, Inactive and Pending patents

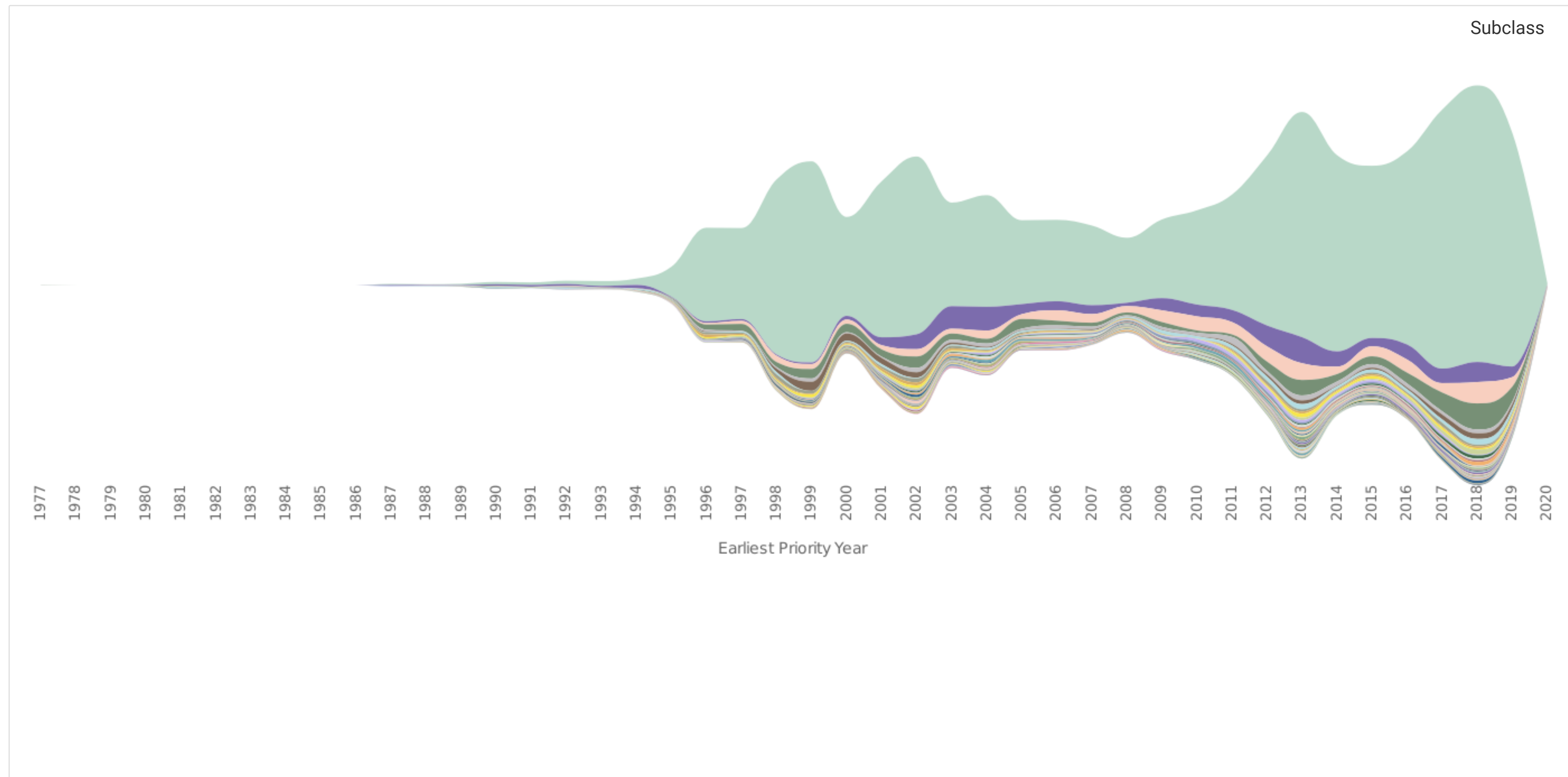


Technology Timeline

The chronological distribution of patent fillings in each technical field.

Total # of Patent Families : 27,395; # of Patent Families in the chart : 26,414

Patents included: Active, Inactive and Pending patents



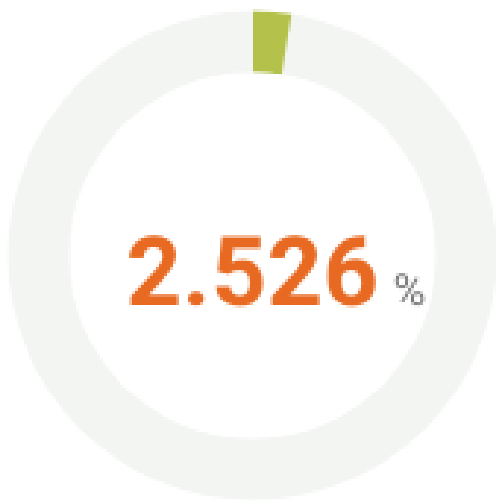
Co-Ownerships and Co-Applicants

Potential limitations for future enforcement.

Total # of Applications : 64,044; # of Applications in the chart : 2,153

Patents included: Active, Inactive and Pending patents

Co-Owned Patents



1618 Applications

Co-Applications





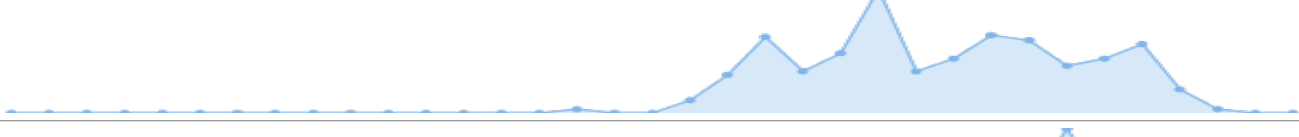




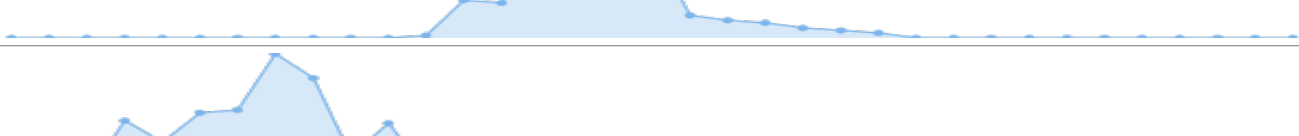

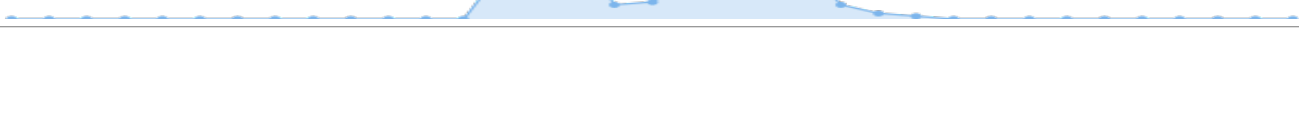
1875 Applications

Top 10 Assignees

Forecast future innovation trends based on past patent filing activities.

Total # of Applications : 64,044; # of Applications in the chart : 60,478

Patents included: Active, Inactive and Pending patents

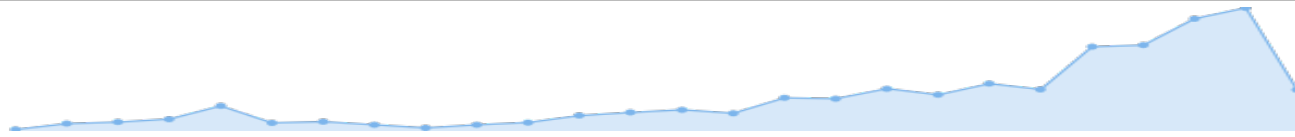
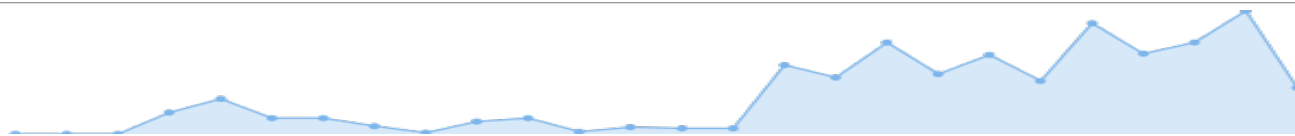
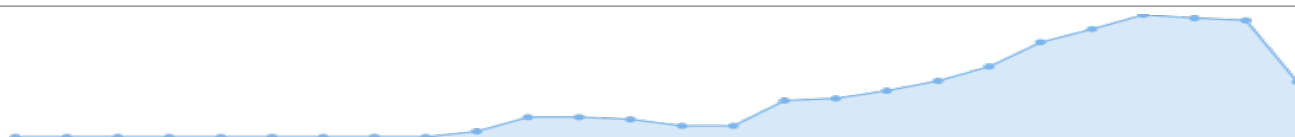


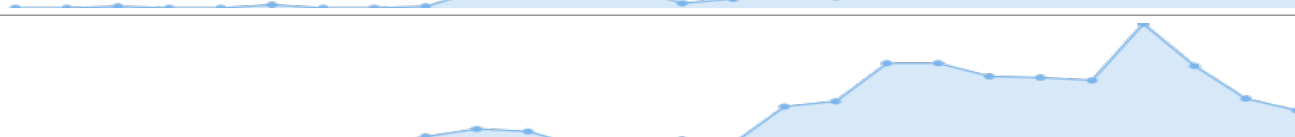

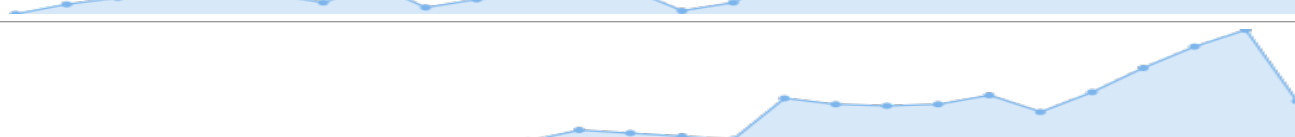
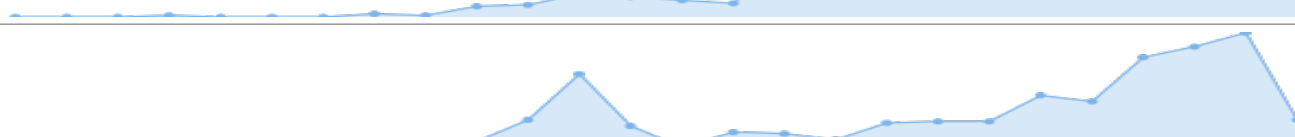
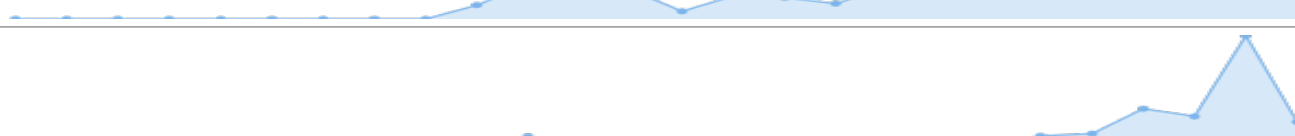
Rank	Applicants	Ultimate Parent	Applications	Timeline X-Axis: Appl. Year(1987-2021)
1	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	57255	
2	IBM CORP	IBM CORP	1334	
3	GLOBALFOUNDRIES INC	MUBADALA TECHNOLOGY INVESTMENTS MUBADALA	441	
4	GLOBAL UNICHIP CORP	GLOBAL UNICHIP CORP	401	
5	FREESCALE SEMICONDUCTOR INC	FREESCALE SEMICONDUCTOR INC	291	
6	VANGUARD INTERNATIONAL SEMICONDUCTOR CORP	VANGUARD INTERNATIONAL SEMICONDUCTOR CORP	276	
7	HEADWAY TECHNOLOGIES INC	TDK CORP	231	
8	PANASONIC CORP	PANASONIC CORP	225	
9	HYUNDAI ELECTRONICS AMERICA INC	HYUNDAI ELECTRONICS AMERICA INC	210	
10	ADVANCED MICRO DEVICES INC	ADVANCED MICRO DEVICES INC	196	

Top 10 Inventors

Forecast future innovation trends based on past patent filing activities.

Total # of Applications : 64,044; # of Applications in the chart : 6,893

Patents included: Active, Inactive and Pending patents

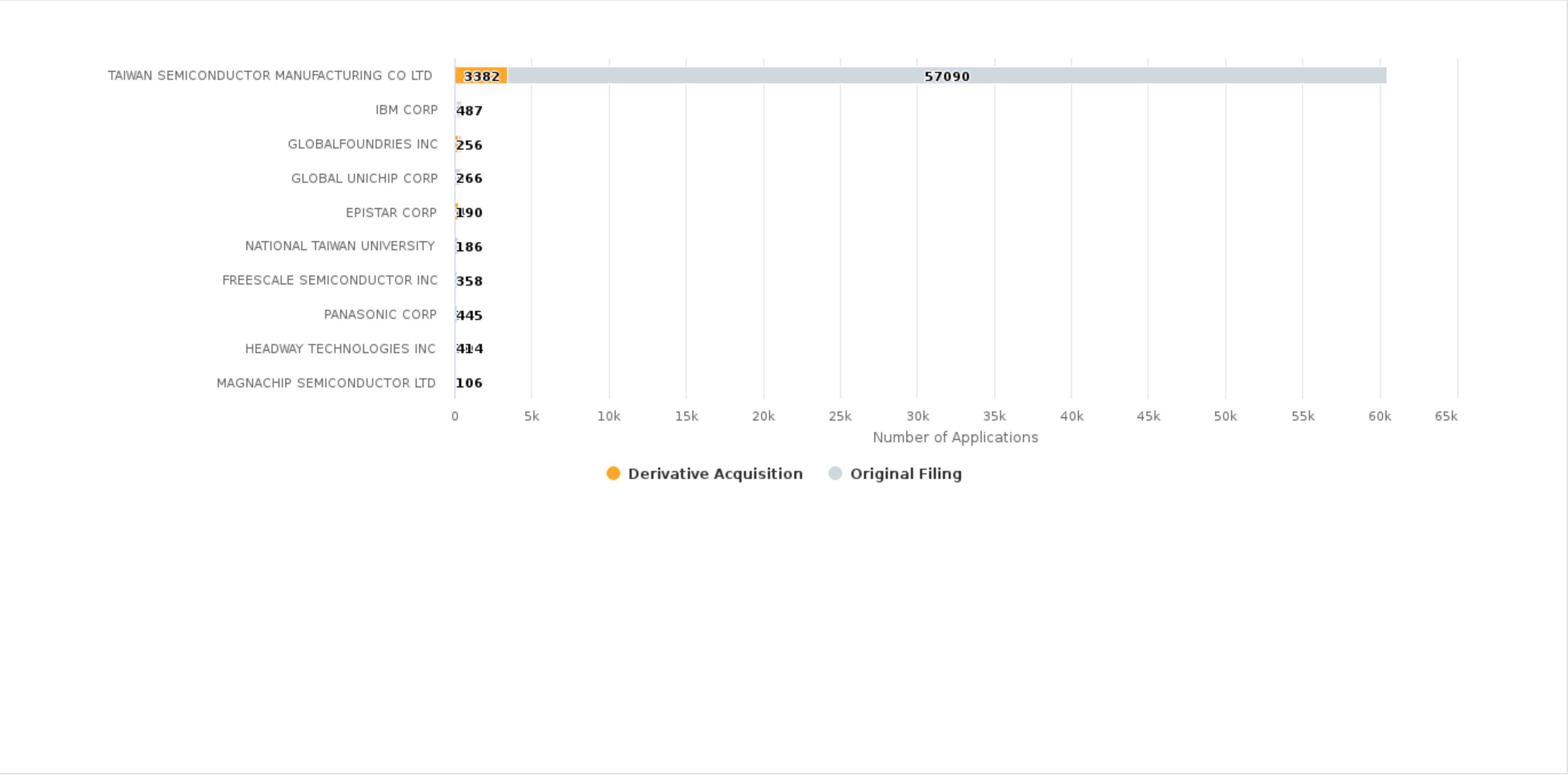
Rank	Inventors	Ultimate Parent	Applications	Timeline X-Axis: Appl. Year(1995-2020)
1	YU CHEN-HUA	IMEC,TAIWAN SEMICONDUCTOR MANUFACTURING CO	2204	
2	LIU CHUNG-SHI	IMEC,TAIWAN SEMICONDUCTOR MANUFACTURING CO	891	
3	CHEN HSIEN-WEI	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	861	
4	YAUNG DUN-NIAN	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	633	
5	LIAW JHON JHY	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	632	
6	LIN JING-CHENG	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	609	
7	TSAI CHIA-SHIUNG	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	545	
8	JENG SHIN-PUU	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	544	
9	CHANG CHING-YU	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	525	
10	WANG CHIH-HAO	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	525	

Current Patent Owners

Discover whether the patents were filed by the owners or acquired from others.

Total # of Applications : 64,044; # of Applications in the chart : 62,106

Patents included: Active, Inactive and Pending patents

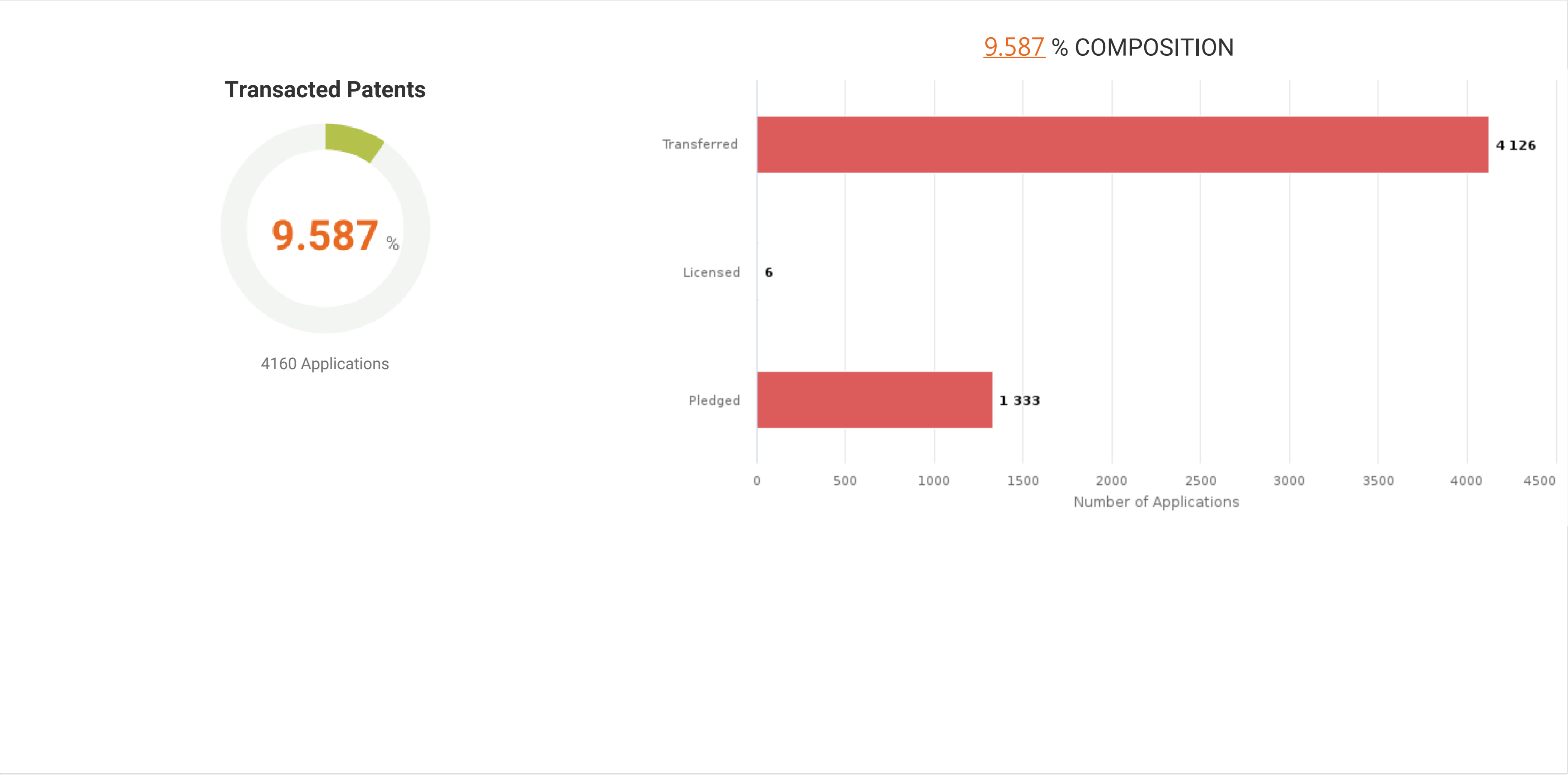


Transacted Patents (US and CN Patents Only.)

The value of these patents has been recognized; However, the practicing rights may be limited and should be watched closely.

Total # of Applications : 43,392; # of Applications in the chart : 4,160

Patents included: Active, Inactive and Pending patents

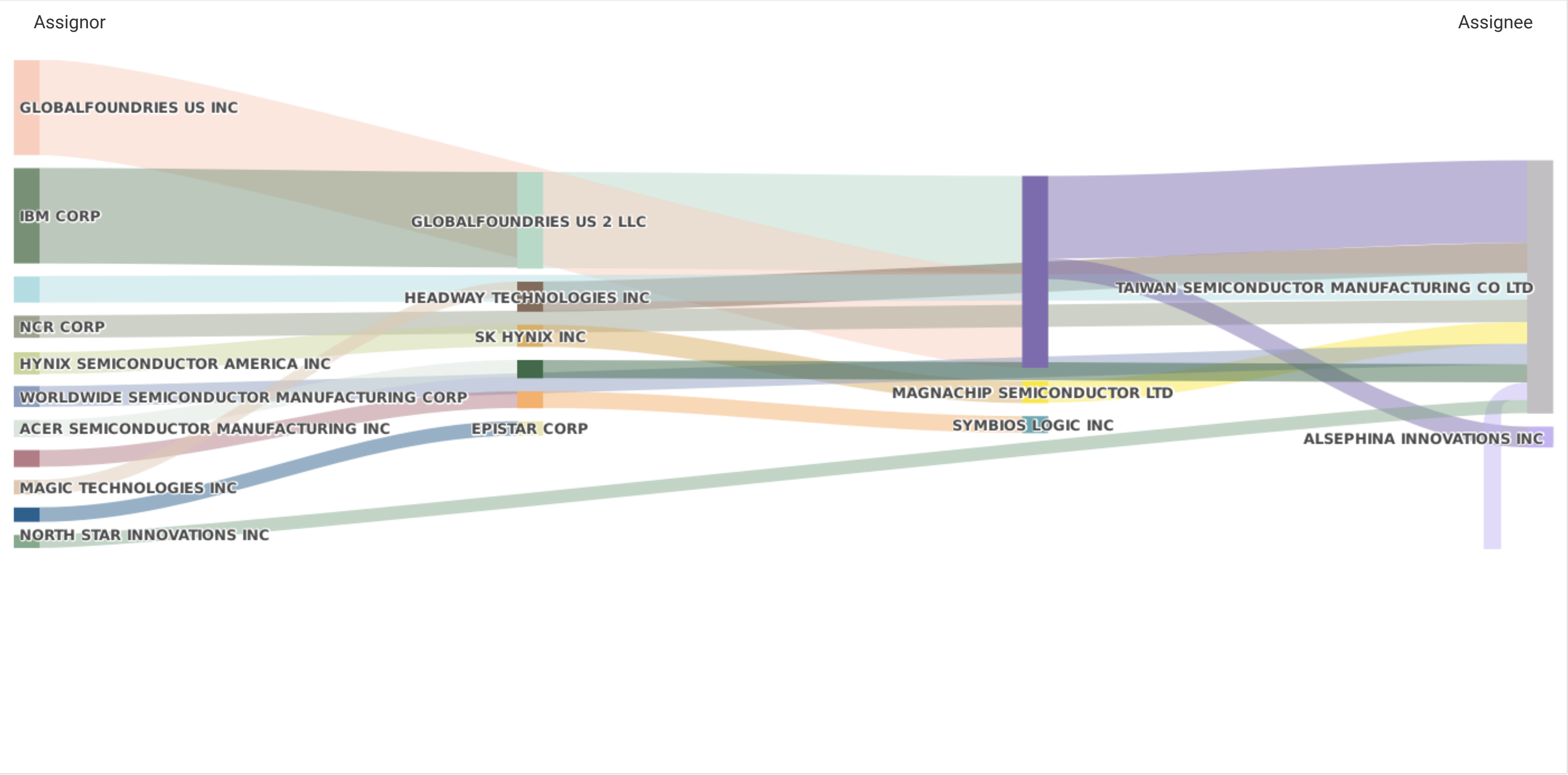


Transacted Patents - Transferred (US and CN Patents Only.)

The value of these patents has been recognized; However, the practicing rights may be limited and should be watched closely.

Total # of Applications : 4,126; # of Applications in the chart : 4,120

Patents included: Active, Inactive and Pending patents

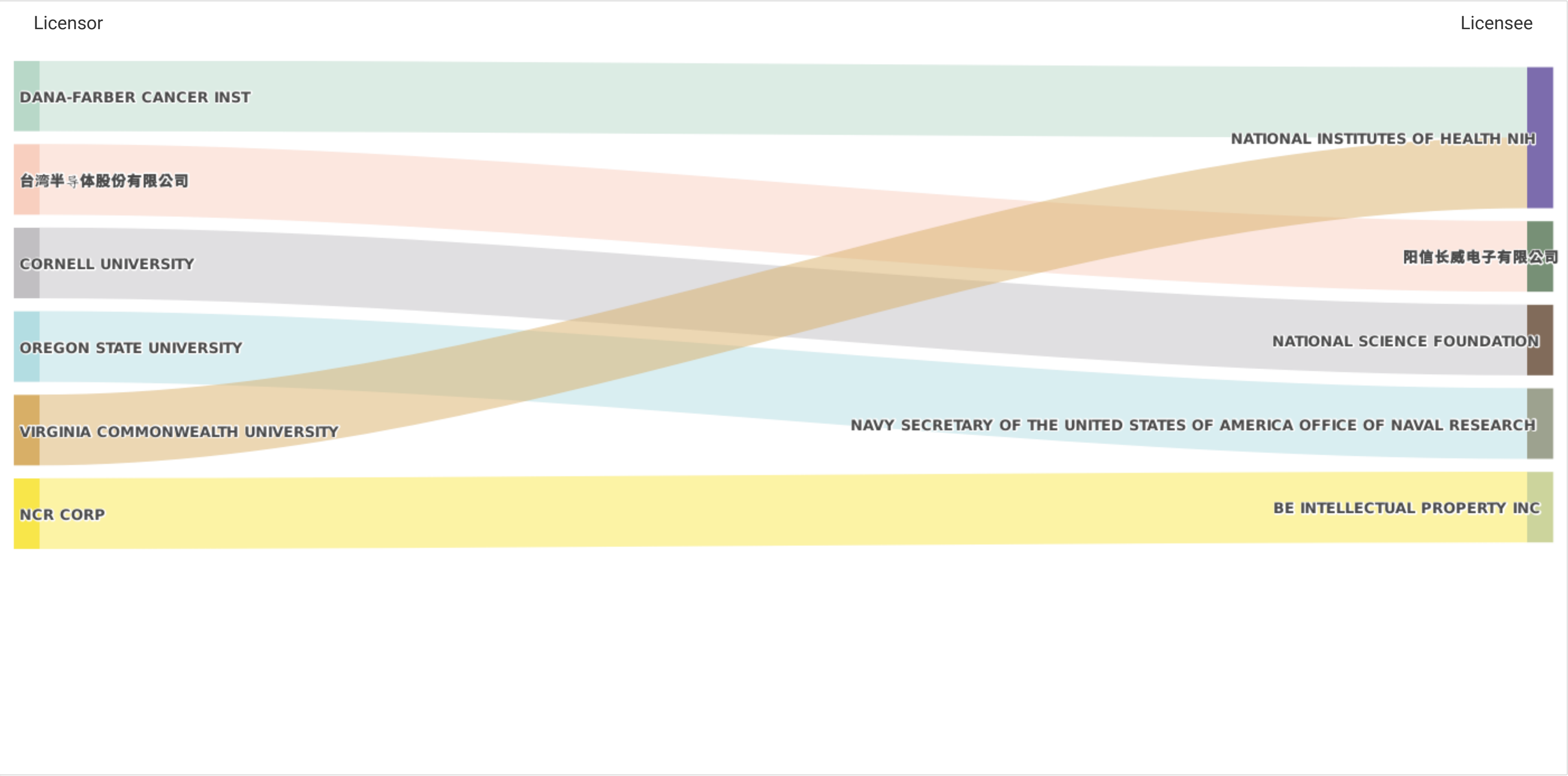


Transacted Patents - Licensed (US and CN Patents Only.)

The value of these patents has been recognized; However, the practicing rights may be limited and should be watched closely.

Total # of Applications : 6; # of Applications in the chart : 6

Patents included: Active, Inactive and Pending patents

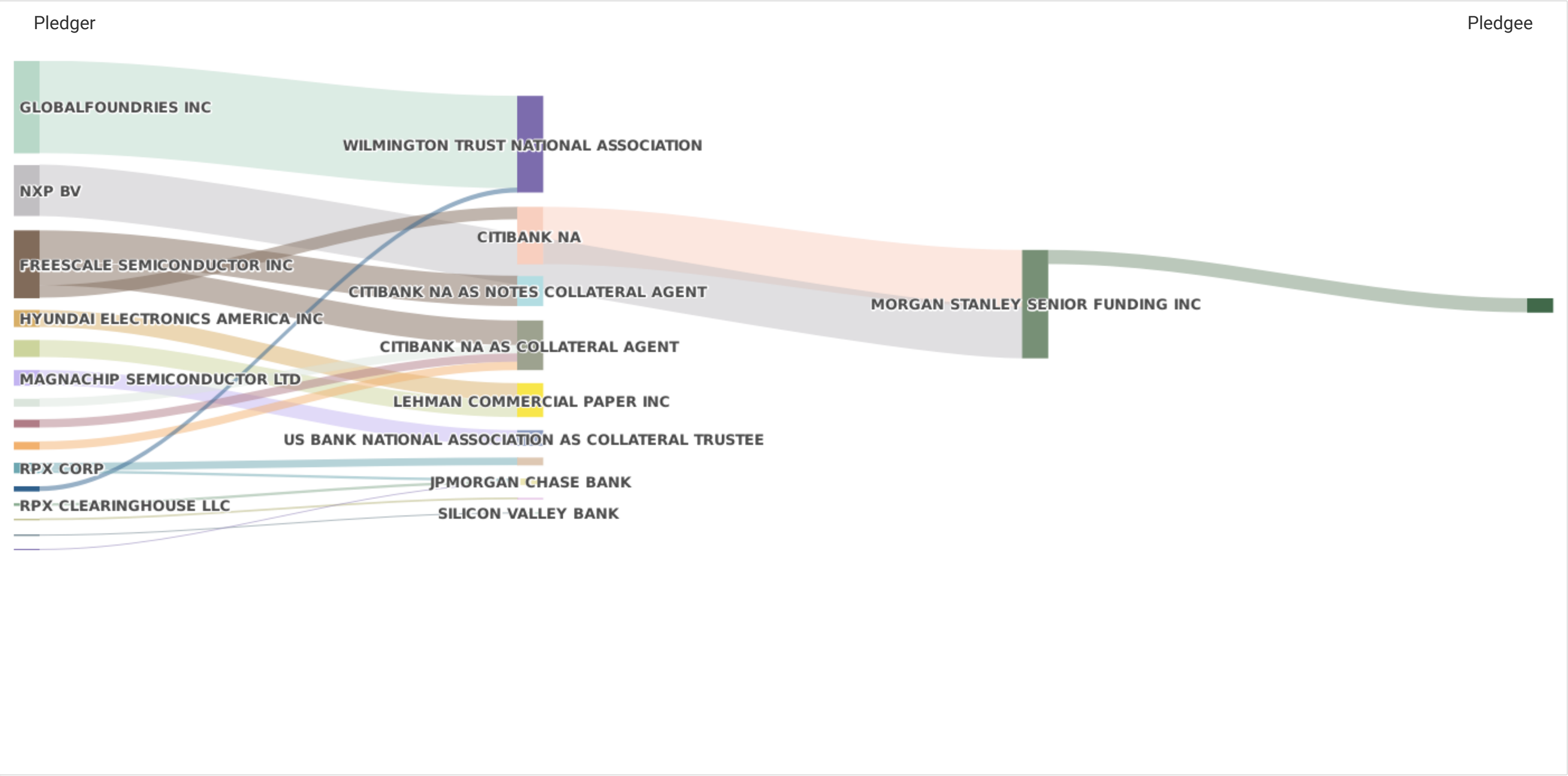


Transacted Patents - Pledged (US and CN Patents Only.)

Patents that have been pledged in the past; you can pay attention to which companies have patents.

Total # of Applications : 1,333; # of Applications in the chart : 1,333

Patents included: Active, Inactive and Pending patents

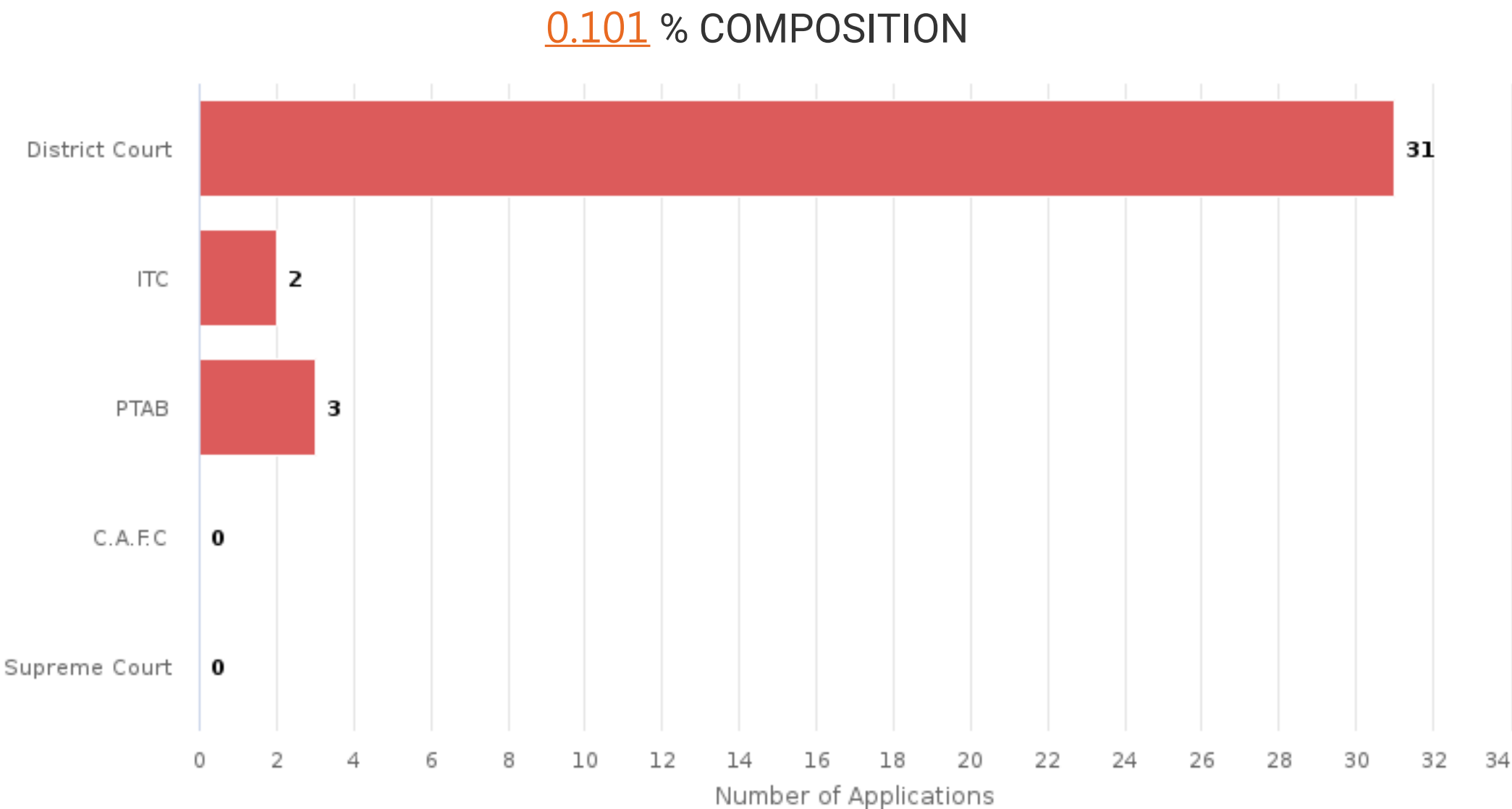


Litigated Patents (US Patents Only.)

Double-check any invalidity, settlement, or licensing activities.

Total # of Applications : 32,706; # of Applications in the chart : 33

Patents included: Active, Inactive and Pending patents

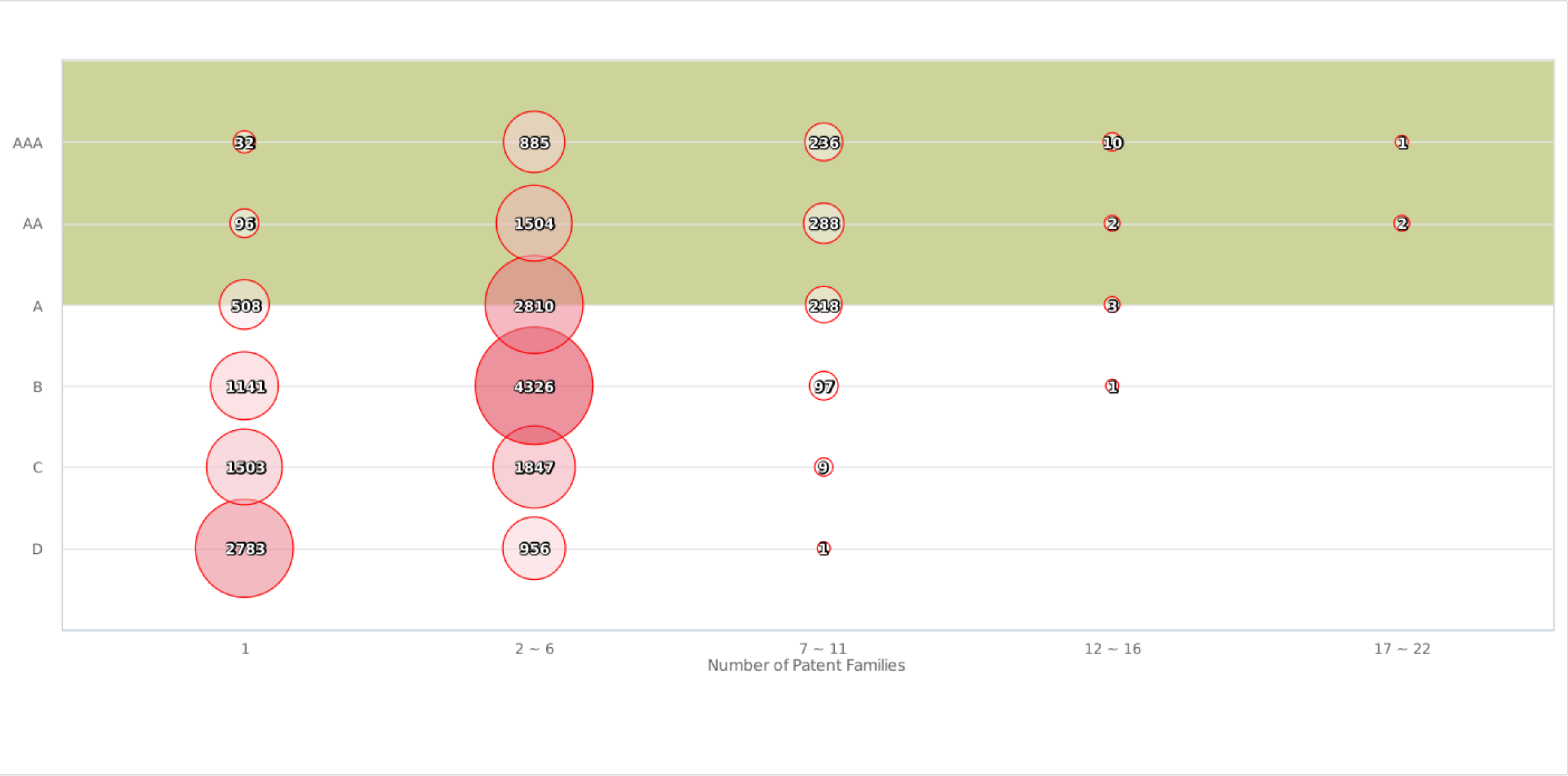


High-Value Patent Families (US, CN, EP, JP, KR, TW Patents Only.)

An indication of the tendency to be transacted or practiced in regional markets.

Total # of Patent Families : 19,259; # of Patent Families in the chart : 19,259

Patents included: TW, JP, KR, CN, EP and US Active and Pending patents

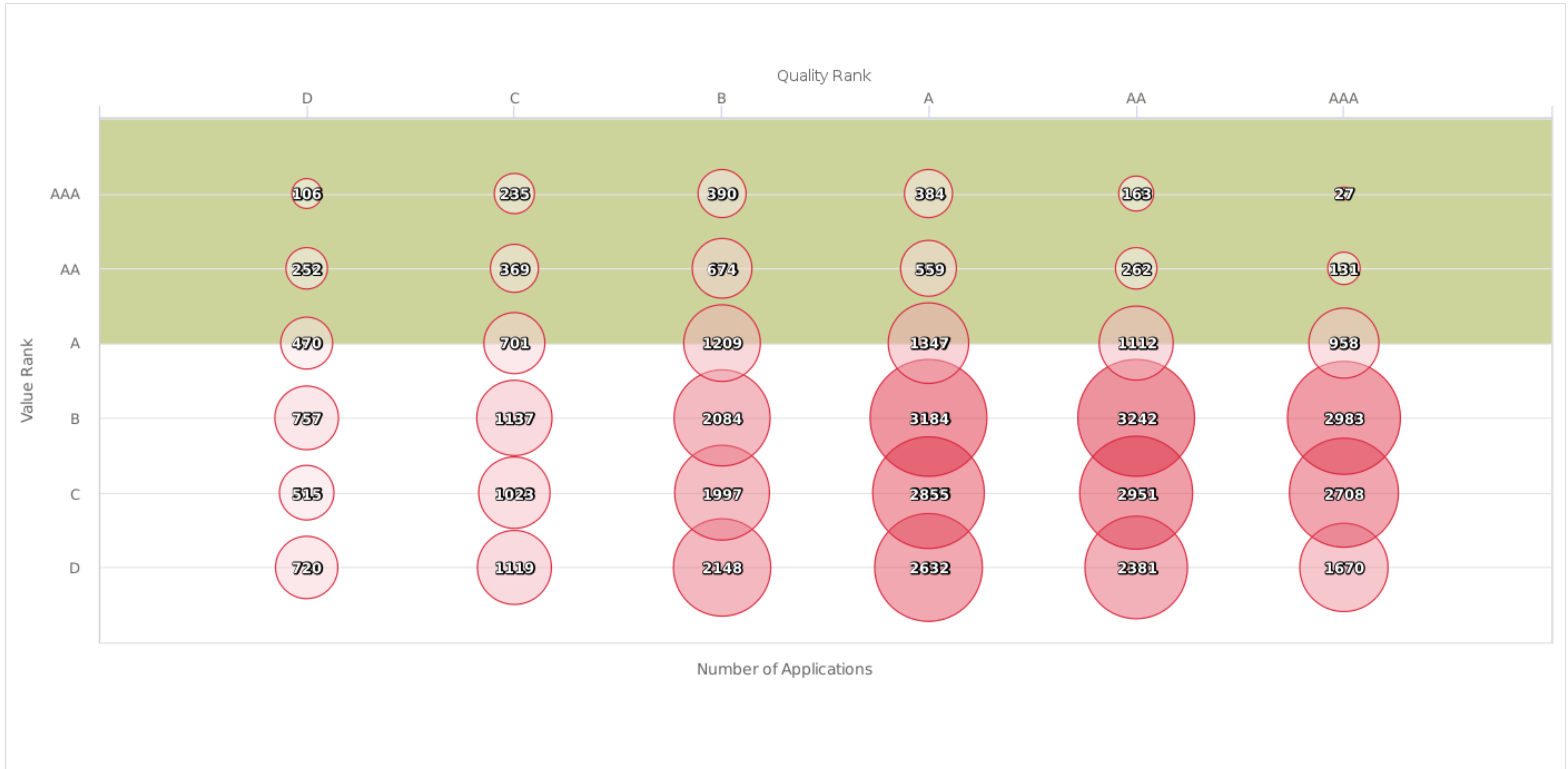


Quality of High-Value Patents (US, CN, EP, JP, KR, TW Patents Only.)

An indication of the tendency to be practiced and how difficult invalidation may be.

Total # of Applications : 45,455; # of Applications in the chart : 45,455

Patents included: TW, JP, KR, CN, EP and US Active and Pending patents

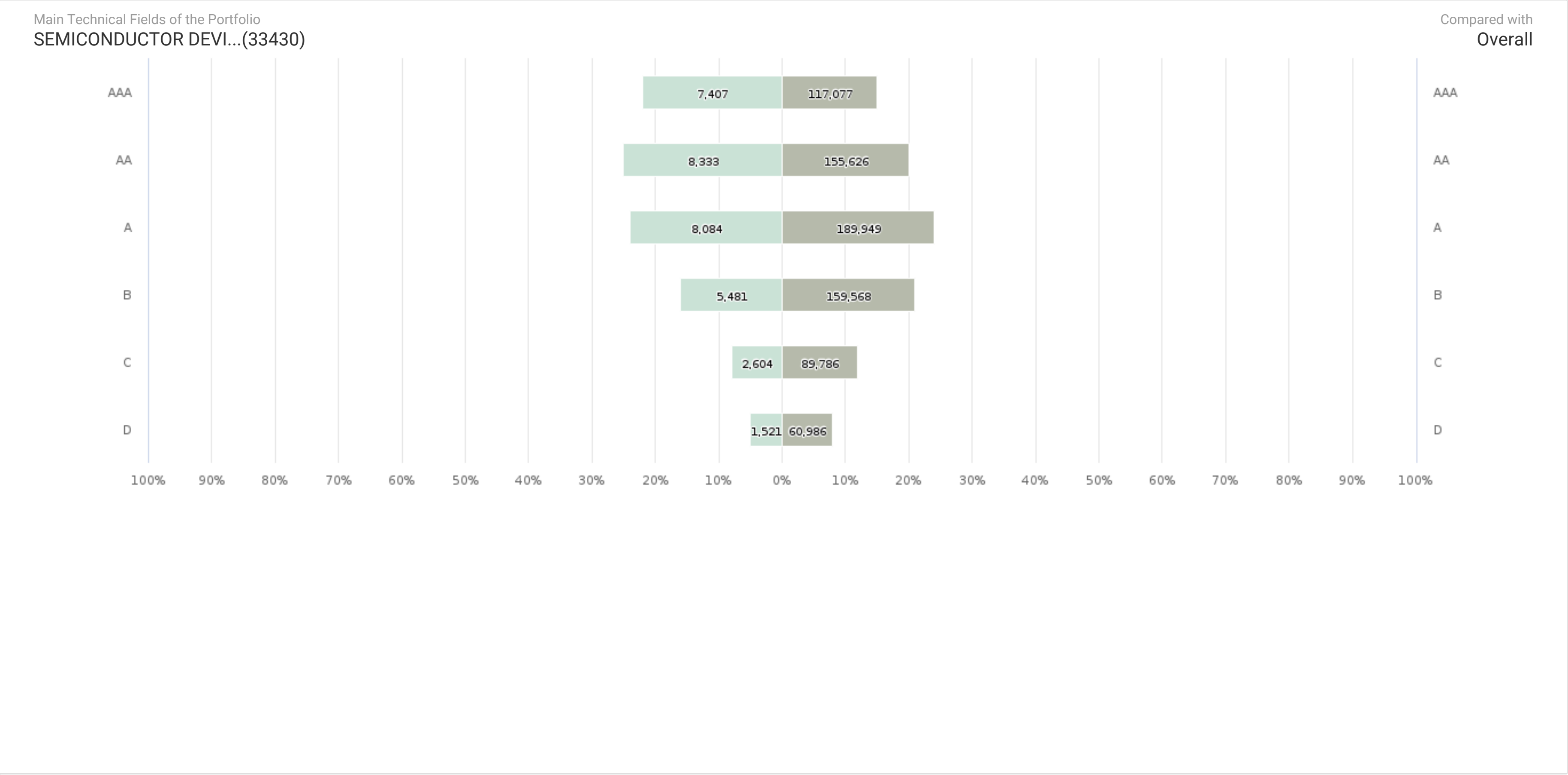


Peer Comparison in the Same Field (US, CN, EP, JP, KR, TW Patents Only.)

Competitive position in the relevant technology field.
Total # of Applications : 45,339; # of Applications in the chart : 45,074

Patents included: TW, JP, KR, CN, EP and US Active and Pending patents

Compared by : Quality

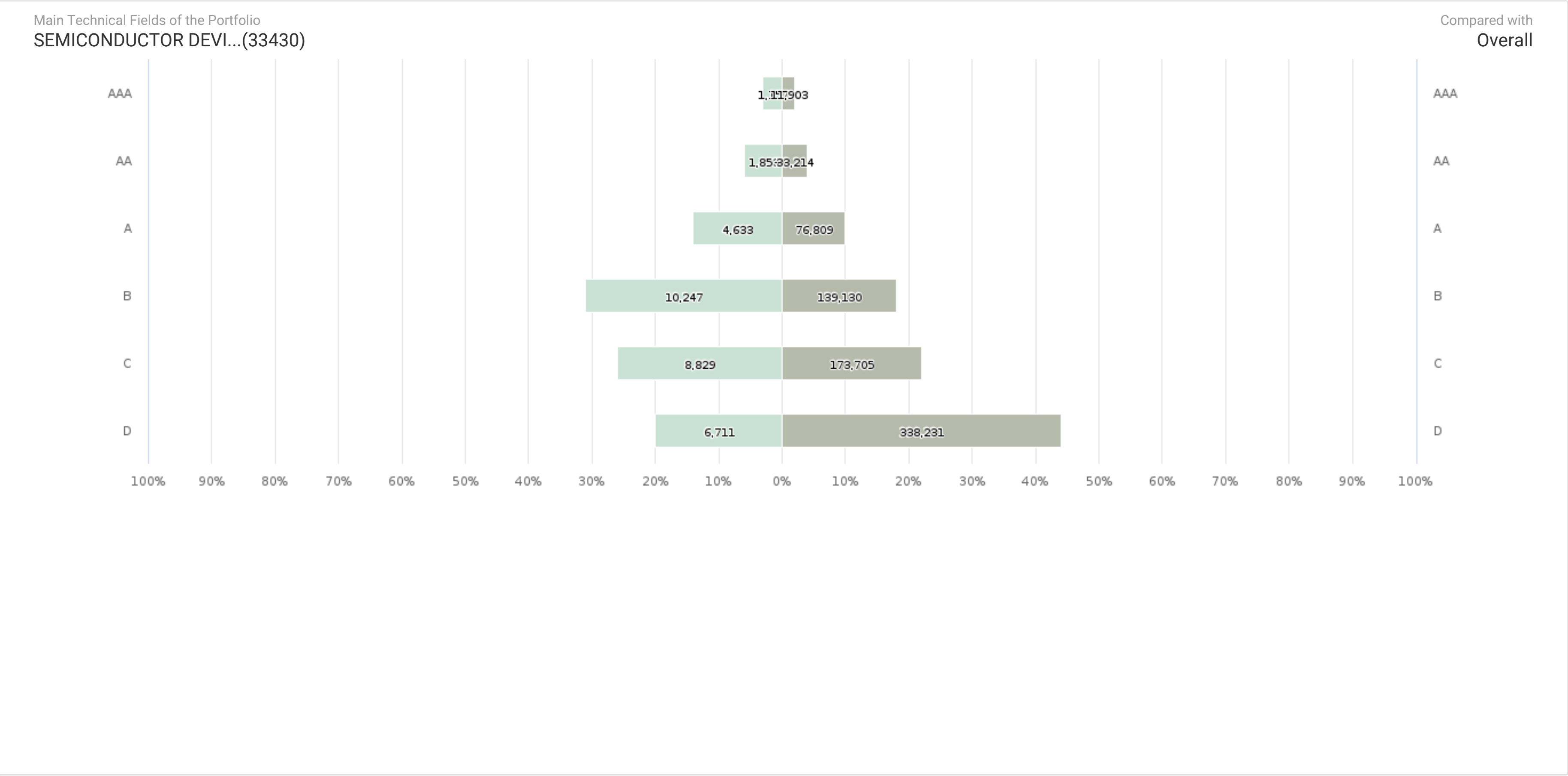


Peer Comparison in the Same Field (US, CN, EP, JP, KR, TW Patents Only.)

Competitive position in the relevant technology field.
Total # of Applications : 45,339; # of Applications in the chart : 45,074

Patents included: TW, JP, KR, CN, EP and US Active and Pending patents

Compared by : Value

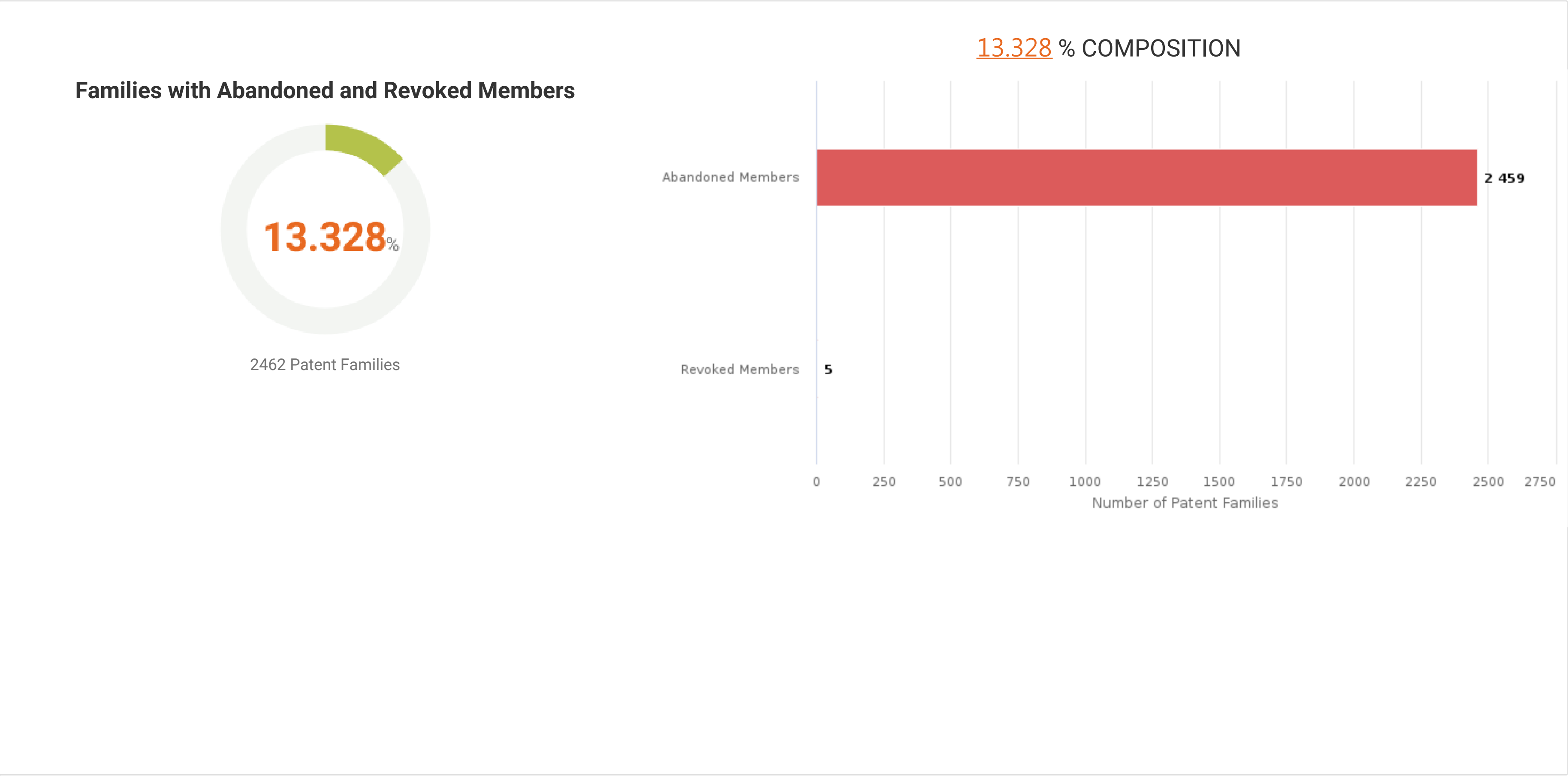


Abandoned and Revoked Family Members

An indication of quality issues such as family members not overcoming prior art.

Total # of Patent Families : 18,472; # of Patent Families in the chart : 2,462

Patents included: Active and Pending patents



Eligibility and Novelty Issues (Pending Patents Only.)

The family members may have similar quality issues to the patents analyzed in this chart.

Total # of Applications : 25,669; # of Applications in the chart : 17,553

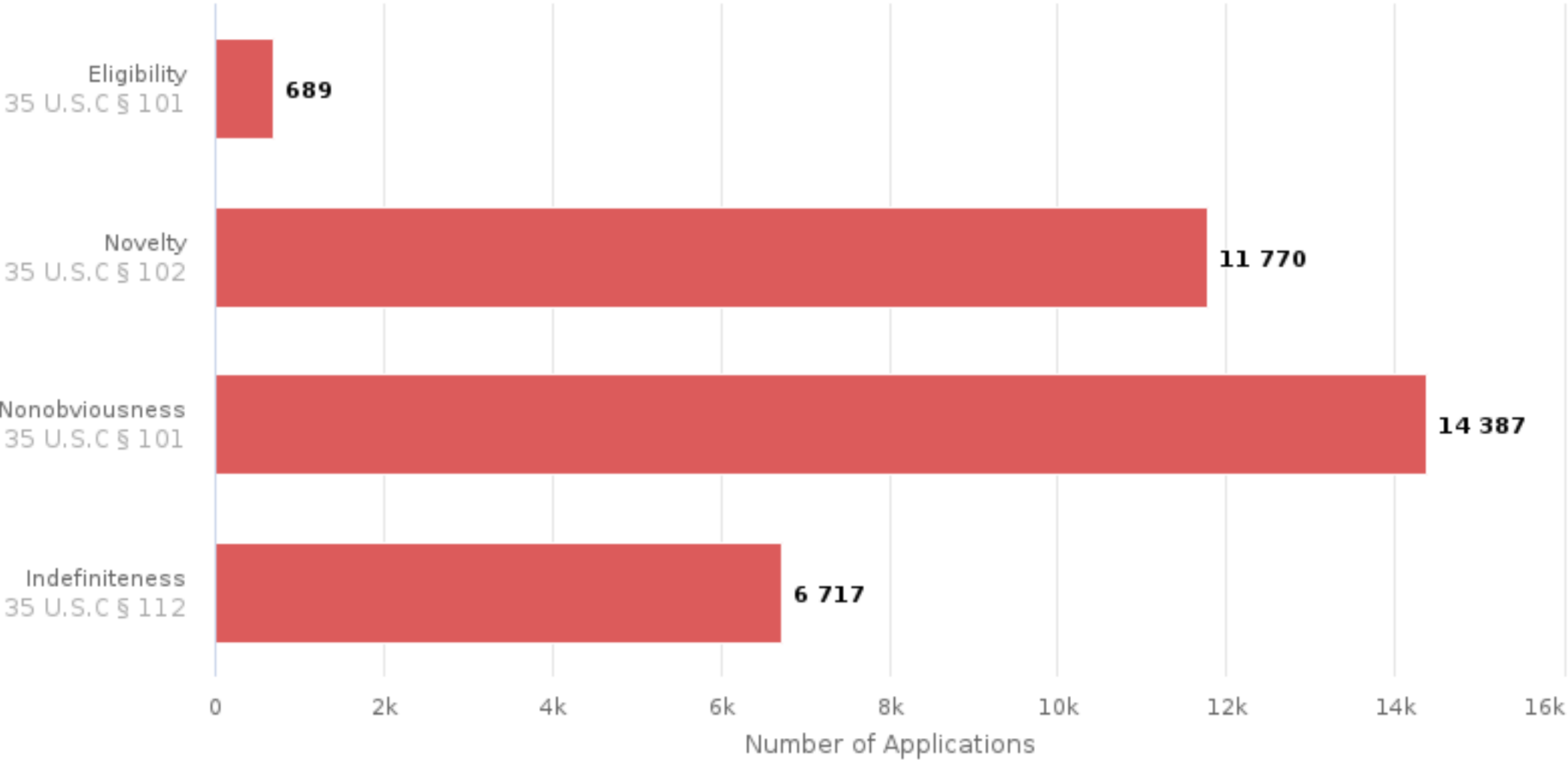
Patents included: Active and Pending patents

Eligibility and Novelty Issues



17553 Applications

68.382 % COMPOSITION



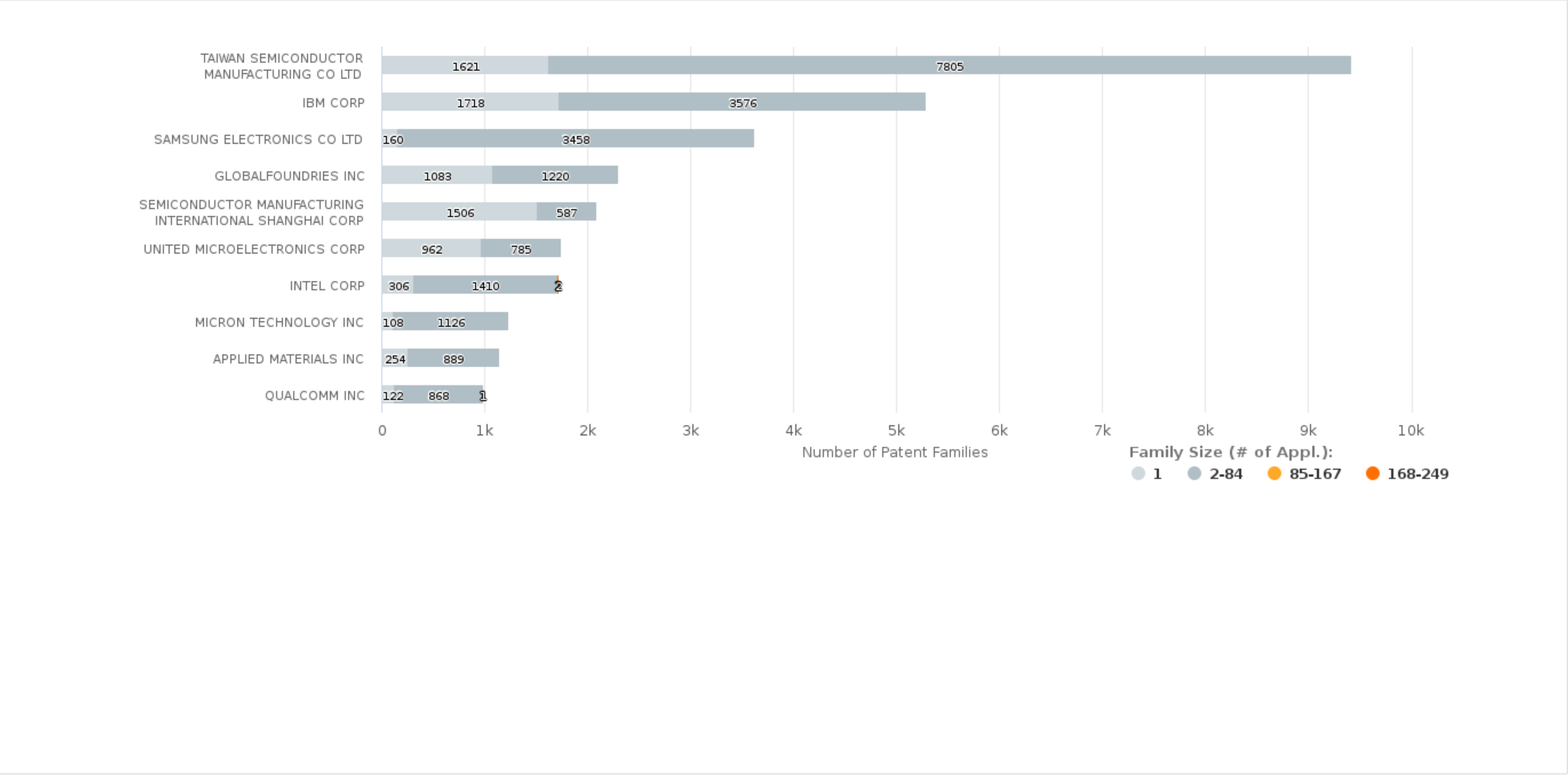
Potential Targets of the Portfolio

Determine the estimated likelihood of the potential targets practicing the patents – based on the continuity of patent filings in recent years.

Total # of Patent Families : 74,555; # of Patent Families in the chart : 29,197

Patents included: Active and Pending Forward Citations

Compared by : Quantity



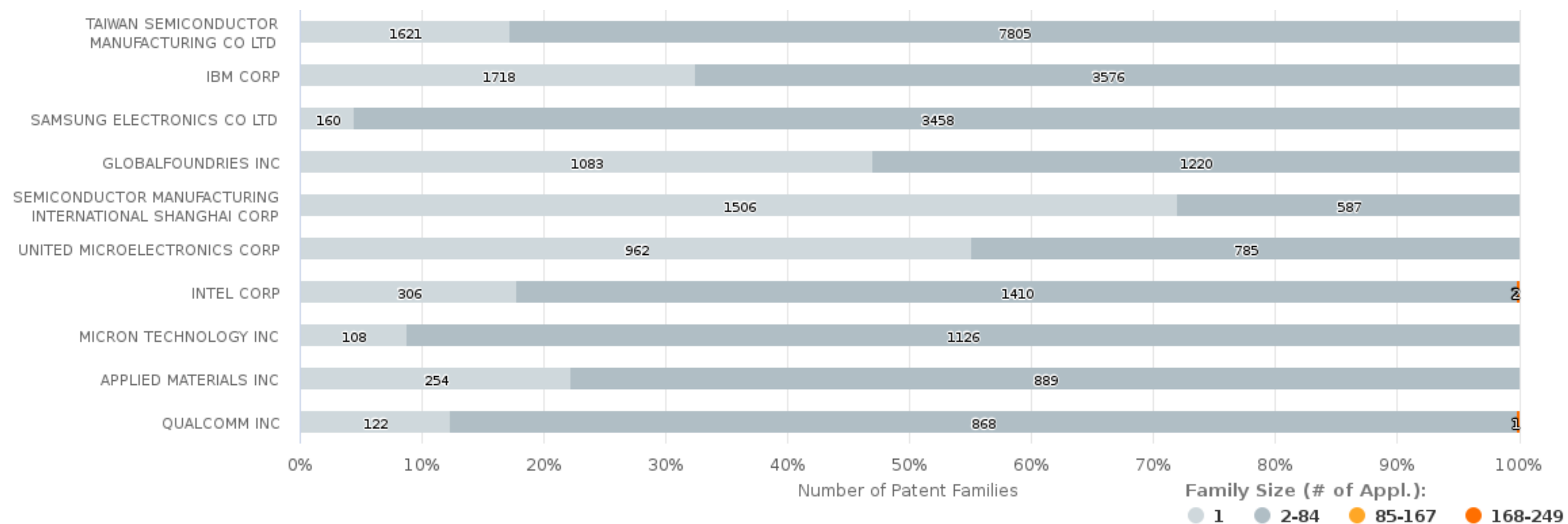
Potential Targets of the Portfolio

Determine the estimated likelihood of the potential targets practicing the patents – based on the continuity of patent filings in recent years.

Total # of Patent Families : 74,555; # of Patent Families in the chart : 29,197

Patents included: Active and Pending Forward Citations

Compared by : **Percentage**



Uncover the followers of relevant patent filings and their likelihood of being potential targets – based on the size of the patent family of the

Total # of Patent Families : 74,555; # of Patent Families in the chart : 26,823

Rank	Applicants	Ultimate Parent	Simple Family	Timeline X-Axis: Earliest Priority Year(1992-2020)
1	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	9426	
2	IBM CORP	IBM CORP	5294	
3	SAMSUNG ELECTRONICS CO LTD	SAMSUNG ELECTRONICS CO LTD	3618	
4	GLOBALFOUNDRIES INC	MUBADALA TECHNOLOGY INVESTMENTS MUBADALA	2303	
5	SEMICONDUCTOR MANUFACTURING INTERNATIONAL SHANGHAI CORP	SMIC INVESTMENT SHANGHAI CORP	2093	
6	UNITED MICROELECTRONICS CORP	UNITED MICROELECTRONICS CORP	1747	
7	INTEL CORP	INTEL CORP	1718	
10	QUALCOMM INC	QUALCOMM INC	991	

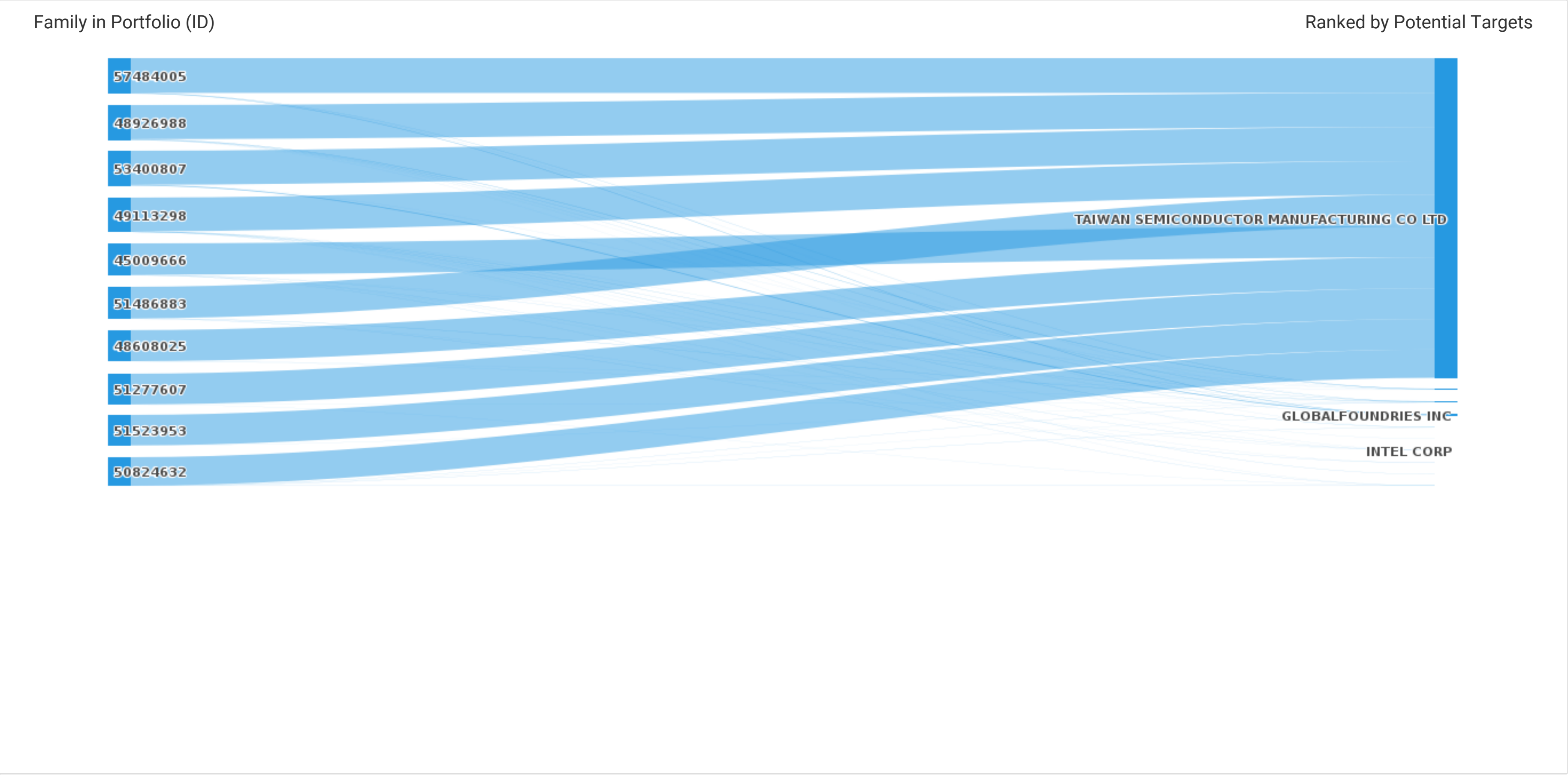
Patents Against the Potential Targets

The patent families that may be used against the potential targets.

Total # of Patent Families : 74,556; # of Patent Families in the chart : 29,197

Patents included: Active and Pending Forward Citations

Ranked by : Potential



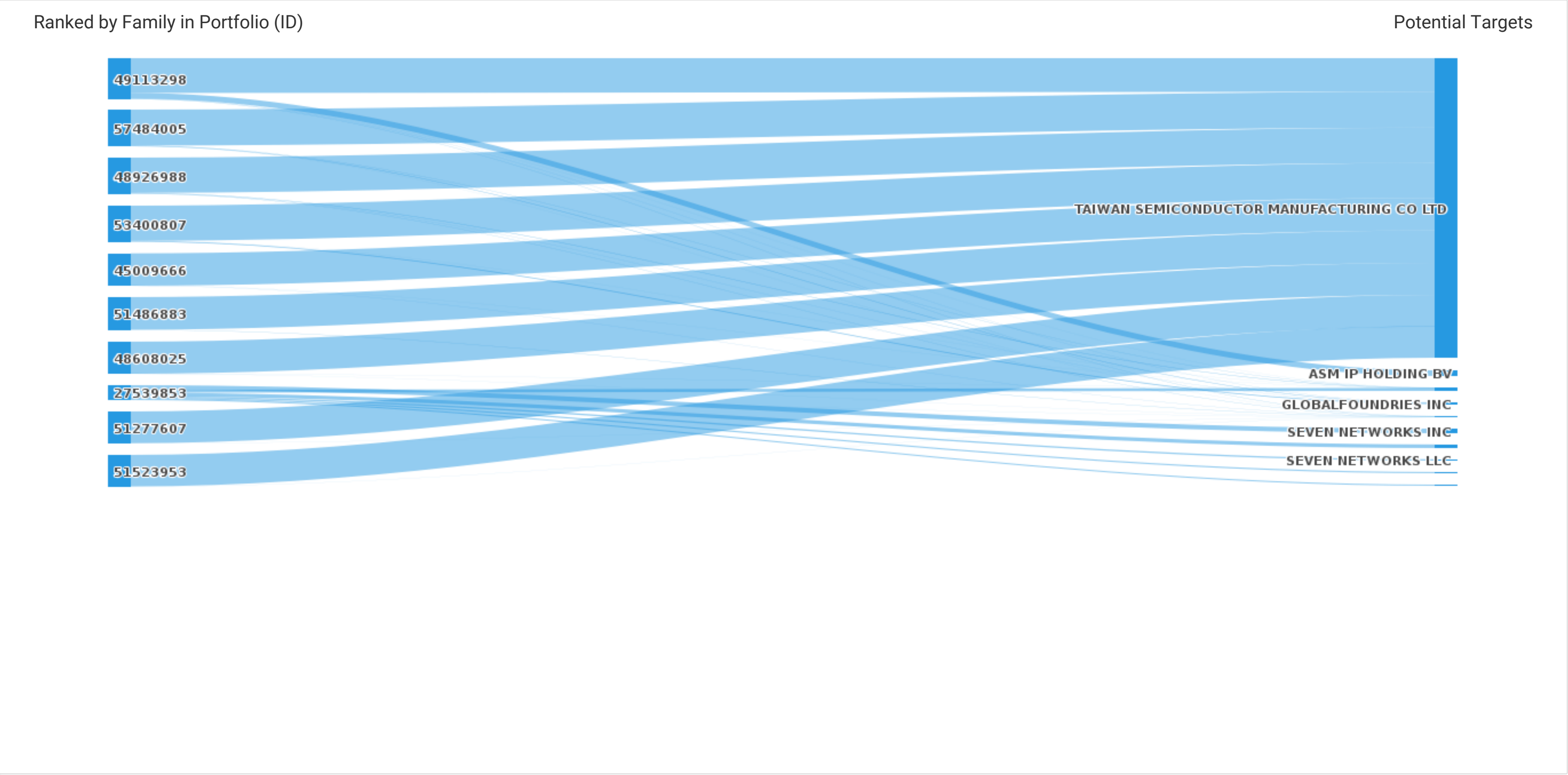
Patents Against the Potential Targets

The patent families that may be used against the potential targets.

Total # of Patent Families : 1,651; # of Patent Families in the chart : 1,328

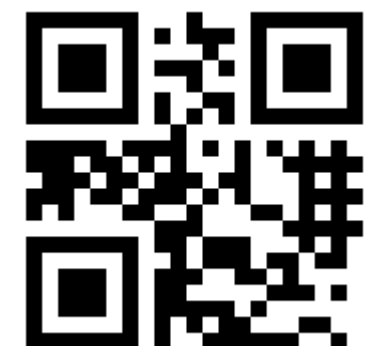
Patents included: Active and Pending Forward Citations

Ranked by : Family ID





InQuartik is an IP intelligence company dedicated to converting patent data into actionable insights and delivering AI-driven solutions. From first-tier companies and law firms to SMEs, InQuartik supports IP professionals throughout the entire patent lifecycle so that they can work smarter, live better, and gain more success.



www.inquartik.com

Disclaimer

InQuartik has made its utmost effort to ensure that all information contained within Patentcloud has been obtained from reliable sources.

INQUARTIK AND ITS SUPPLIERS OR DISTRIBUTORS DO NOT MAKE ANY SPECIFIC PROMISES ABOUT PATENTCLOUD OR INQUARTIK'S SERVICES AND MATERIALS. FOR EXAMPLE, INQUARTIK DOES NOT MAKE ANY COMMITMENTS ABOUT THE CONTENT ON PATENTCLOUD, THE SPECIFIC FUNCTIONS OF PATENTCLOUD, OR THEIR RELIABILITY, AVAILABILITY, OR ABILITY TO MEET YOUR NEEDS. INQUARTIK PROVIDES THE SERVICES AND MATERIALS ON PATENTCLOUD "AS IS" AND HEREBY DISCLAIMS ALL EXPRESS OR IMPLIED REPRESENTATIONS, WARRANTIES, GUARANTIES, AND CONDITIONS, INCLUDING FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT.

ALL INFORMATION OR DATA CONTAINED WITHIN PATENTCLOUD IS PROVIDED FOR GENERAL INFORMATION PURPOSES ONLY, AND NO INFORMATION HEREIN CONSTITUTES LEGAL ADVICE.