

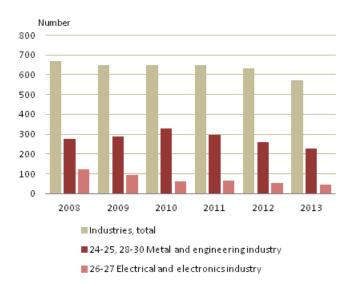
Patenting 2013

Fewer patents were granted in Finland to Finnish companies in 2013 than in previous years

According to Statistics Finland, the patents received by Finnish enterprises and associations decreased in 2013 by some nine per cent year-on-year. Altogether, Finnish enterprises and associations received 573 patents, and the number hit its lowest level in six years.

In particular, patents received by the metal industry fell, continuing on the downward trend that started in 2010. Patents granted to the metal industry declined by 13 per cent from 2012 and by 32 per cent from 2010. The number of patents granted to the electronic industry also continued decreasing slightly.

Patents granted in Finland to enterprises and associations in certain industries in 2008 to 2013



Finnish enterprises and associations also applied for less patents than in previous years. In 2013, Finnish enterprises and associations applied for a total of 1,252 patents, and the amount declined by three per cent from the previous year. Utility design applications by Finnish enterprises and associations also decreased by three per cent from 2012, while the number of applications directed at the metal industry shrunk by around 19 per cent.

Contents

rewer patents were applied for and granted in Finland than in previous years	3
1. Patents applied for and granted in Finland	3
2. Patents applied for abroad by Finnish inventors.	4
3. Utility designs and European patents in Finland.	5
Tables	
Appendix tables	
Appendix table 1. Patent applications filed in Finland, 1985, 1990, 1995, 2000 and 2005–2013	7
Appendix table 2. Domestic patent applications by region, 2009–2013	7
Appendix table 3. Domestic patent applications and domestic patents granted to enterprises and associations by industry (TOL 2008), 2013	
Appendix table 4. European patents validated in Finland by IPC-section and resident country of assignee, 2013	38
Appendix table 5. Patents granted to Finnish enterprises and associations by European Patent Office by indust (TOL 2008), 2012 and 2013	2
Appendix table 6. Domestic utility model applications of enterprises and associations by industry (TOL 2008), and 2013	
Figures	
Figure 1. Patent applications filed in Finland by IPC section, 2013	3
Figure 2. Regional distribution of domestic patent applications, 2013	4
Figure 3. Patents granted in Finland by IPC section, 2013	4
Figure 4. Utility model applications filed in Finland by IPC section, 2013	5
Figure 5. Selected countries shares of European patents validated in Finland, 2012 and 2013	6
Figure 6. Patents granted and validated in Finland, 2003–2013	6

Fewer patents were applied for and granted in Finland than in previous years

1. Patents applied for and granted in Finland

1.1 Patents applied for in Finland

The number of patent applications in Finland decreased by around five per cent from the year before. A total of 1,737 patent applications were filed, of which 1,593 were filed by Finnish applicants and 144 by foreign applicants. Patent applications filed by Finnish enterprises, associations and private citizens decreased from one year ago, while applications by foreigners increased. Most of foreigners' patent applications were directed at electricity (H) and Finns' applications at performing operations and transporting (B) (Figure 1). A majority of foreign applicants came from the United States, but German and Japanese applicants were also active.

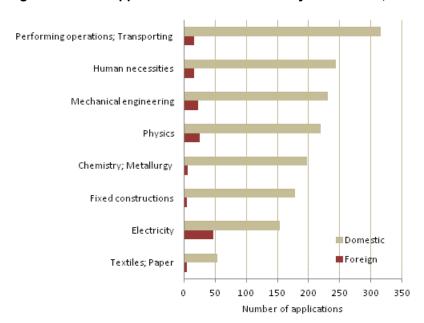
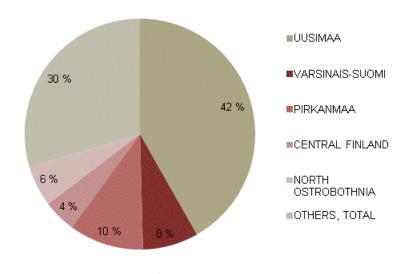


Figure 1. Patent applications filed in Finland by IPC section, 2013

Domestic patent applications by Finnish enterprises and associations decreased by three per cent year-on-year (1,252 applications by 536 enterprises), and viewed by industry, Finnish enterprises and associations applied for most patents directed at the metal industry. When examined by region, the majority of Finnish applicants were located in Uusimaa (42 per cent) and every tenth inventor came from Pirkanmaa. A large number of patent applications were also filed in Varsinais-Suomi, North Ostrobothnia and Central Finland (Figure 2).

Figure 2. Regional distribution of domestic patent applications, 2013



1.2 Patents granted in Finland

The number of patents granted in Finland continued to contract (Figures 3 and 6). A total of 711 patents were granted in Finland to domestic and foreign applicants, of which the patents received by Finnish enterprises, associations and private citizens numbered 641 and those by foreign applicants 70. In particular, the patents received by foreign applicants in Finland fell drastically, as the number of patents granted to foreigners was nearly halved from one year ago. Patents received by Finnish enterprises, associations and private citizens decreased, in turn, by around nine per cent year-on-year: 573 patents by 239 enterprises.

A majority of the foreign applicants that received patents came from Germany and the United States. Patents granted based on IPC sections were among foreign enterprise applicants most common in mechanical engineering (F) and electricity (H) (Figure 3), and among Finnish applicants in performing operations and transporting (B).

Performing operations; Transporting

Mechanical engineering

Chemistry; Metallurgy

Fixed constructions

Human necessities

Electricity

Textiles; Paper

Physics

0 50 100 150 200 250

Number of patents

Figure 3. Patents granted in Finland by IPC section, 2013

2. Patents applied for abroad by Finnish inventors

The European Patent Office (EPO) granted a total of 645 patents to Finnish enterprises or associations, which was slightly fewer than one year earlier. The number of enterprises that received patents remained

unchanged, however, at 173 enterprises. The most popular main industry for which patents were granted was manufacturing, and nearly one-half of all patents granted to Finns were directed at the electronics industry.

3. Utility designs and European patents in Finland

3.1 Utility design applications in Finland

Slightly more utility design applications were filed in Finland than last year, a total of 480, of which 444 applications were filed by Finnish applicants. Applications filed by foreign enterprises and private citizens increased while applications by Finns remained the same as last year. Among domestic utility design applications the proportion of enterprises was 262 applications and that of private citizens 182 applications. The number of applications filed by private citizens increased by nine, while the number of enterprise applications decreased by the same amount.

Most domestic applications were filed in the IPC section performing operations and transporting (B), where nearly one-third of the Finnish enterprises having applied filed their utility design application. Foreign applicants favoured the sections human necessities (A), performing operations and transporting (B) and physics (G), and most applications were filed for physics. Unlike patent applications, no foreign applications were filed for the IPC section H, electricity. (Figure 4)

Performing operations; Transporting

Fixed constructions

Human necessities

Mechanical engineering

Electricity

Physics

Chemistry; Metallurgy

Textiles; Paper

0 20 40 60 80 100 120

Figure 4. Utility model applications filed in Finland by IPC section, 2013

3.2 European patents validated in Finland

In 2013, a total of 5,164 European patents were validated in Finland, which was 88 fewer patents than in 2012. The main holder countries of the European patents validated in Finland were the United States, Germany and Japan (Figures 5 and 6). The most popular industries of the validated European patents were the IPC sections of chemistry and metallurgy (C) and human necessities (A).

Number of applications

Figure 5. Selected countries shares of European patents validated in Finland, 2012 and 2013

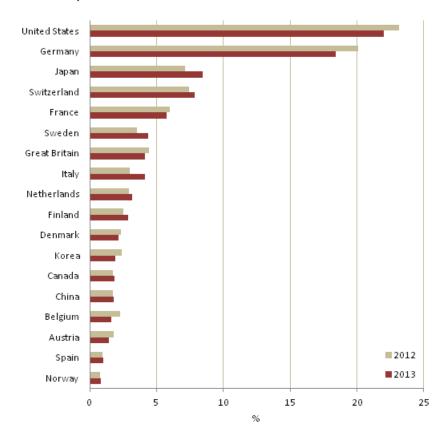
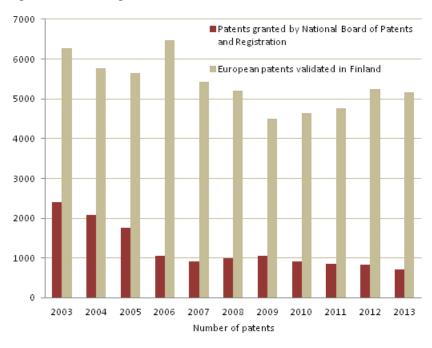


Figure 6. Patents granted and validated in Finland, 2003–2013



Appendix tables

Appendix table 1. Patent applications filed in Finland, 1985, 1990, 1995, 2000 and 2005–2013

Year	Private assignee	Enterprise/ association	Domestic applications total	Foreign applications	Applications total
1985	681	1038	1719	3480	5199
1990	708	1360	2068	4414	6482
1995	731	1393	2124	4240	6364
2000	695	1883	2575	338	2913
2005	464	1371	1835	226	2061
2006	419	1394	1813	205	2018
2007	452	1349	1801	211	2012
2008	401	1397	1798	148	1946
2009	401	1403	1804	127	1931
2010	375	1356	1731	102	1833
2011	385	1261	1646	128	1774
2012	407	1290	1697	128	1825
2013	341	1252	1593	144	1737

Appendix table 2. Domestic patent applications by region, 2009–2013

Region	Year							
	2009	2010	2011	2012	2013			
	Applications total							
Regions Total	1804	1731	1646	1697	1593			
Uusimaa	701	643	602	632	663			
Itä-Uusimaa ¹⁾	26	24						
Varsinais-Suomi	150	107	123	136	124			
Satakunta	45	48	43	51	45			
Kanta-Häme	54	32	62	42	29			
PIrkanmaa	162	207	168	168	166			
Päijät-Häme	63	56	41	41	37			
Kymenlaakso	23	32	23	23	20			
South Karelia	30	33	43	46	54			
Etelä-Savo	43	35	59	71	56			
Pohjois-Savo	85	83	65	57	59			
North Karelia	40	37	38	45	27			
Central Finland	111	115	81	86	73			
South Ostrobothnia	16	28	23	29	22			
Ostrobothnia	56	52	69	82	65			
Central Ostrobothnia	8	8	5	10	6			
North Ostrobothnia	95	109	101	93	91			
Kainuu	16	14	14	9	11			
Lappi	13	19	19	23	19			
Åland	1	2	2		3			
Unknown / Foreign countries	67	47	65	53	28			

¹⁾ Was included in the Uusimaa region 1.1.2011

Appendix table 3. Domestic patent applications and domestic patents granted to enterprises and associations by industry (TOL 2008), 2013

Industry	Domestic app	lications 2013	Domestic patents 2013		
	Applications	Number of enterprises	Patents	Number of enterprises	
Total	1252	536	573	239	
C Manufacturing, total	745	244	376	126	
10-12 Food industry	14	5	5	5	
13-15 Textile, clothing, leather and footwear industry	3	1	5	5	
16-17 Wood and paper industry	84	20	26	3	
19-22 Chemical industry	67	27	42	16	
24-25, 28-30 Metal and engineering industry	391	114	226	56	
26-27 Electrical and electronics industry	137	45	45	23	
Other manufacturing	49	32	27	18	
D, E Electricity, gas and water supply	4	4	11	7	
F Construction	51	36	6	5	
G Wholesale and retail trade	49	35	28	22	
J Information and communication	79	54	22	16	
72 Scientific research and development	92	32	22	7	
M Professional, scientific and technical activities (excl. 72)	105	68	42	32	
Other industries	127	63	66	24	

Appendix table 4. European patents validated in Finland by IPC-section and resident country of assignee, 2013

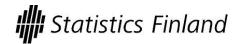
Resident country of assignee		A: Human necessities	B:Performing operations, transporting	C: Chemistry, metallurgy	D: Textiles, paper	E: Fixed constructions	F: Mechanical engineering	G:Physics	H:Electricity
Total of countries	5164	1139	869	1255	192	159	301	467	782
United States	1136	315	94	363	39	8	46	110	161
Germany	951	142	242	190	60	50	82	92	93
Japan	435	64	50	132	10		10	39	130
Switzerland	407	133	73	109	6	7	22	33	24
France	298	48	74	82	5	10	15	31	33
Sweden	226	41	51	24	16	19	15	22	38
Great Britain	214	64	27	62	5	1	15	27	13
Italy	214	57	54	47	4	6	19	15	12
Netherlands	164	34	33	41	7	10	9	13	17
Finland	147	9	40	15	21	8	9	12	33
Denmark	111	28	15	35	3	7	8	5	10
Republic of Korea	100	6	2	7	1			5	79
Canada	96	26	7	14	3		2	14	30
China	92	8	5	10	1		2	3	63
Belgium	82	22	17	19	1	9	9	4	1
Austria	74	16	21	7	6	5	8	6	5
Spain	53	18	8	14		7	2	3	1
Norway	43	12	13	6		1	5	3	3
Total of other countries	321	96	43	78	4	11	23	30	36

Appendix table 5. Patents granted to Finnish enterprises and associations by European Patent Office by industry (TOL 2008), 2012 and 2013

Industry	European Pate	ent Office 2012	European Patent Office 2013		
	Patents	Number of enterprises	Patents	Number of enterprises	
Total	656	173	645	173	
C Manufacturing, total	512	116	540	114	
10-12 Food industry	5	3	2	2	
13-15 Textile, clothing, leather and footwear industry	2	2	3	1	
16-17 Wood and paper industry	17	8	18	7	
19-22 Chemical industry	32	18	23	11	
24-25, 28-30 Metal and engineering industry	126	51	175	50	
26-27 Electrical and electronics industry	313	26	301	26	
Other manufacturing	17	8	18	17	
D, E Electricity, gas and water supply					
F Construction	37	2	2	2	
G Wholesale and retail trade	10	8	14	13	
J Information and communication	16	11	10	8	
72 Scientific research and development	15	7	20	10	
M Professional, scientific and technical activities (excl. 72)	26	16	31	17	
Other industries	40	13	28	9	

Appendix table 6. Domestic utility model applications of enterprises and associations by industry (TOL 2008), 2012 and 2013

Industry	2012		2013		
	Domestic applications	Number of enterprises	Domestic applications	Number of enterprises	
Total	271	204	262	206	
C Manufacturing, total	164	111	141	102	
10-12 Food industry	4	3	2	2	
13-15 Textile, clothing, leather and footwear industry	4	4	4	4	
16-17 Wood and paper industry	19	12	6	6	
19-22 Chemical industry	22	18	10	10	
24-25, 28-30 Metal and engineering industry	80	53	65	48	
26-27 Electrical and electronics industry	22	8	24	10	
Other manufacturing	13	13	30	22	
D, E Electricity, gas and water supply	4	2	1	1	
F Construction	23	20	19	17	
G Wholesale and retail trade	32	28	35	27	
J Information and communication	10	9	8	8	
72 Scientific research and development	2	2	10	7	
M Professional, scientific and technical activities (excl. 72)	28	25	28	27	
Other industries	8	7	20	17	



Suomen virallinen tilasto Finlands officiella statistik Official Statistics of Finland

Science, Technology and Information Society 2014

Inquiries

Heidi Pirkola 029 551 3246 Director in charge: Hannele Orjala tiede.teknologia@stat.fi www.stat.fi

Source: Patenting 2013. Statistics Finland