

Patenting 2008

Domestic and European patenting by enterprises on the increase

Domestic patenting by enterprises and associations declined steadily from 2000 to 2005, when enterprises filed 1,371 domestic patent applications. The decline halted in 2006, when slight growth was recorded, but in 2007 the number of applications fell again and totalled 1,349. In 2008, the number of applications began to show growth again and enterprises or associations filed 1,397 domestic patent applications. In 2008, the number of enterprises or associations having filed patent applications rose to 512 whereas in 2007 they numbered 467. Examined by industry, patenting increased in the manufacture of wood and wood products, and in the manufacture of metal, metal products and machinery. By contrast, in the manufacture of electrical and optical equipment the number of enterprises' domestic patent applications fell clearly, from 226 in 2007 to 141 in 2008.

The number of European patents granted by the European Patents Office to Finnish enterprises or associations went up slightly, from 732 in 2007 to 768 in 2008. The electronics industry was again fairly dominant, as 450 of the European patents were granted to enterprises in this industry.

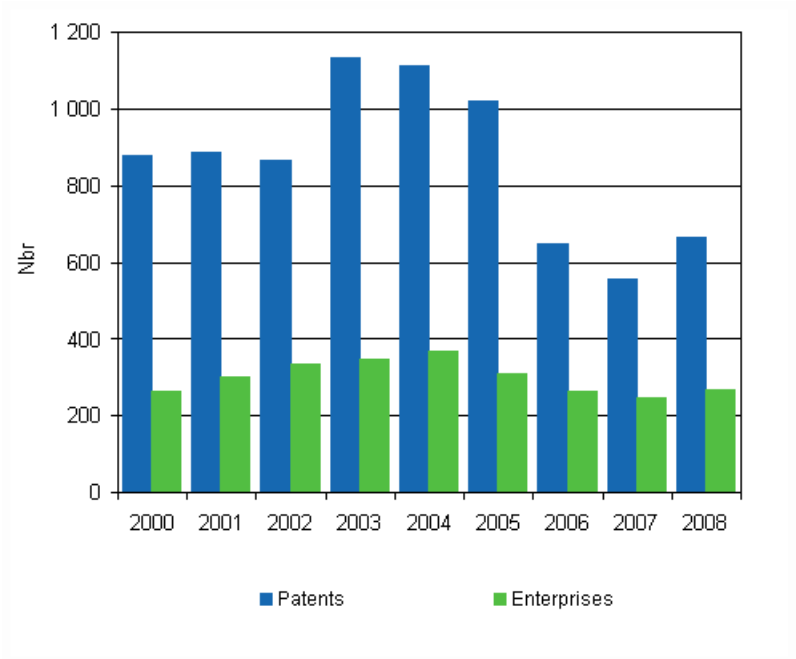
A total of 1,946 patents were applied for in Finland in 2008. This is slightly below the figures for 2006 and 2007 when patent applications numbered around 2,010 and 2,020. Most of this is explained by a fall in the number of applications from abroad. Because international patenting has increased, the number of foreign applications made direct in Finland has been low for some years now. However, the proportional change from 2007 is significant, as 211 foreign applications were still made in 2007 but in 2008 they only numbered 148.

Calculated from information on the inventors' places of domicile given in the patent applications, approximately 40 per cent of the domestic patent applications were filed in 2008 by inventors resident in the region of Uusimaa. The share of Uusimaa was unchanged from the year before. Pirkanmaa had the next largest share of 11 per cent.

The number of patents granted in Finland went up by 68 from 2007 and totalled 998 in 2008. Of these, 668 were granted to enterprises or associations. The number of patents granted to enterprises was slightly over 100 higher than in 2007 when 559 patents were granted. The numbers of granted patents grew most in the sections of electricity, chemistry and metallurgy, and textiles and paper. The growth applied to patents granted to domestic applicants, which went up from 619 in 2007 to 729 in 2008, whereas patents granted to foreign applicants decreased from 301 to 269.

In 2008, European patents validated in Finland numbered 5,210, which is slightly over 200 patents more than in 2007. The main sections of the European patents were chemistry and metallurgy (24 per cent of all European patents) and human necessities (21 per cent.) Germany (1,144 patents) only just passed the U.S.A. (1,104 patents) as the assignee of the largest number of European patents validated in Finland.

Figure: Domestic patents granted to enterprises and associations in 2000-2008



Contents

Tables

Table 1. Patent applications filed in Finland in 1985-2008.....	4
Table 2. Domestic patent applications by region in 2001, 2003, 2005, 2007 and 2008.....	4
Table 3A. Domestic patent applications of enterprises and associations by industry (TOL 2002) in 2001, 2004, 2007 and 2008.....	5
Table 3B. Domestic patent applications of enterprises and associations by industry (TOL 2008) in 2008.....	5
Table 4. Patents granted in Finland by IPC section in 2008.....	6
Table 5A. Domestic patents granted to enterprises and associations by industry (TOL 2002) in 2001, 2004, 2007 and 2008.....	6
Table 5B. Domestic patents granted to enterprises and associations by industry (TOL 2008) in 2008.....	6
Table 6. European patents validated in Finland by IPC-section and resident country of assignee in 2008.....	7
Table 7A. Patents granted to finnish enterprises by European Patent Office by industry (TOL 2002) in 2007 and 2008.....	7
Table 7B. Patents granted to finnish enterprises by European Patent Office by industry (TOL 2008) in 2008.....	8

Figures

Figure 1. Patent applications filed in Finland by IPC section in 2008.....	9
Figure 2. Patents granted and validated in Finland in 2002 - 2008.....	9
Figure 3. Patents granted in Finland 2008.....	10
Figure 4. European patents validated in Finland in 2008.....	10
Figure 5. Selected countries shares of European patenting in 2007 and 2008.....	11

Tables

Table 1. Patent applications filed in Finland in 1985-2008

Year	Private assignee	Firm - community	Domestic applications total	Foreign applications	Applications Total
1985	681	1038	1719	3480	5199
1986	718	1035	1753	3630	5383
1987	747	1104	1851	3949	5800
1988	742	1235	1977	4091	6068
1989	682	1262	1944	4415	6359
1990	708	1360	2068	4414	6482
1991	863	1315	2178	4013	6191
1992	803	1247	2050	3948	5998
1993	891	1316	2207	3768	5975
1994	941	1395	2336	3852	6188
1995	731	1393	2124	4240	6364
1996	802	1424	2226	3087	5313
1997	784	1626	2410	2258	4668
1998	680	1791	2471	387	2858
1999	678	1833	2511	359	2870
2000	695	1883	2575	338	2913
2001	627	1764	2391	277	2668
2002	550	1606	2156	216	2372
2001	467	1506	1973	214	2187
2004	443	1567	2010	215	2225
2005	464	1371	1835	226	2061
2006	419	1394	1813	205	2018
2007	452	1349	1801	211	2012
2008	401	1397	1798	148	1946

Table 2. Domestic patent applications by region in 2001, 2003, 2005, 2007 and 2008

Region	Year				
	2001	2003	2005	2007	2008
Regions Total	2390	1972	1826	1801	1798
Uusimaa	793	748	714	716	719
Itä-Uusimaa	40	28	32	34	16
Varsinais-Suomi	202	170	139	145	122
Satakunta	79	55	57	38	41
Kanta-Häme	47	38	49	35	35
Pirkanmaa	364	270	179	189	196
Päijät-Häme	73	49	51	59	64
Kymenlaakso	58	33	40	44	32
South Karelia	25	27	29	29	35
Etelä-Savo	27	27	34	34	42
Pohjois-Savo	101	56	84	70	63
North Karelia	40	47	45	34	31
Central Finland	200	131	120	110	107
South Ostrobothnia	33	24	21	23	25
Ostrobothnia	31	41	61	61	63
Central Ostrobothnia	19	13	4	5	11
North Ostrobothnia	160	135	137	106	95
Kainuu	14	9	13	7	13
Lappi	26	15	18	15	16
Åland	2	.	5	1	1
Unknown / Foreign countries	54	59	1	50	71

Table 3A. Domestic patent applications of enterprises and associations by industry (TOL 2002) in 2001, 2004, 2007 and 2008

Industry	Year							
	2001		2004		2007		2008	
	Applications	Nr of enterprises	Applications	Nr of enterprises	Applications	Nr of enterprises	Applications	Nr of enterprises
Total of industries	1775	610	1583	552	1349	467	1397	512
Total of manufacturing industries	1137	296	1066	295	840	217	854	250
Manufacture of food products and beverages	23	10	11	9	16	9	17	6
Manufacture of textiles and clothing	12	6	12	6	8	3	4	2
Manufacture of wood and wood products	52	20	49	18	38	11	83	21
Manufacture of chemicals and chemical products	102	34	56	35	79	35	70	31
Manufacture of metals, metal products, machinery	467	125	541	142	437	91	505	116
Manufacture of electrical and optical equipment	419	69	356	61	226	52	141	51
Other manufacturing industries	62	32	41	24	36	16	34	23
Total of other industries	638	314	517	257	509	250	543	262
Electricity, gas and water supply	3	3	0	0	.	.	2	1
Construction	23	19	42	19	26	20	25	21
Wholesale and retail trade	75	54	63	49	51	33	50	34
Transport, storage and communication	94	14	37	7	18	9	25	11
Computer and related activities	94	59	56	35	63	43	73	43
Research and development	118	29	103	26	131	26	99	26
Other business activities	176	102	162	87	137	33	175	82
Other industries	55	34	54	34	83	33	94	44

Table 3B. Domestic patent applications of enterprises and associations by industry (TOL 2008) in 2008

Industry	Applications	N r o f enterprises
Total	1397	512
C Manufacturing, total	852	248
10-12 Food industry	17	6
13-15 Textile, clothing, leather and footwear industry	4	2
16-17 Wood and paper industry	83	21
19-22 Chemical industry	68	29
24-25, 28-30 Metal and engineering industry	501	110
26-27 Electrical and electronics industry	132	48
Other manufacturing	79	38
D,E Electricity, gas and water supply	3	2
F Construction	25	21
G Wholesale and retail trade	59	42
J Information and communication	90	51
72 Scientific research and development	99	26
M Professional, scientific and technical activities (excl. 72)	166	76
Other industries	103	46

Table 4. Patents granted in Finland by IPC section in 2008

Industry	Patents granted in Finland		European patents validated in Finland	
	Total	Finnish assignees	Total	Finnish assignees
Total of patents granted	998	729	5210	143
A: Human necessities	121	58	1109	24
B: Performing operations, transporting	195	179	840	21
C: Chemistry, metallurgy	127	47	1251	23
D: Textiles, paper	119	99	212	11
E: Fixed constructions	31	27	201	9
F: Mechanical engineering	78	69	244	5
G: Physics	137	118	463	18
H: Electricity	190	132	890	32

Table 5A. Domestic patents granted to enterprises and associations by industry (TOL 2002) in 2001, 2004, 2007 and 2008

Industry	Year							
	2001		2004		2007		2008	
	Patents	Enterprises	Patents	Enterprises	Patents	Enterprises	Patents	Enterprises
Total of industries	886	302	1114	372	559	246	668	268
Total of manufacturing industries	711	192	817	218	396	150	480	148
Manufacture of food products and beverages	13	6	9	4	3	3	1	1
Manufacture of textiles and clothing	5	3	3	2	3	2	5	3
Manufacture of wood and wood products	24	13	19	11	17	5	24	10
Manufacture of chemicals and chemical products	61	26	55	26	33	22	25	19
Manufacture of metals, metal products, machinery	196	87	356	98	223	66	266	62
Manufacture of electrical and optical equipment	403	48	357	65	111	46	147	43
Other manufacturing industries	9	9	18	12	6	6	12	10
Total of other industries	175	110	297	154	163	96	188	120
Electricity, gas and water supply	2	1	2	2	1	1	1	1
Construction	12	11	7	6	3	3	10	8
Wholesale and retail trade	27	16	22	14	24	15	20	13
Transport, storage and communication	37	10	72	14	12	2	11	7
Computer and related activities	8	7	40	31	28	17	24	17
Research and development	26	11	35	12	27	14	33	16
Other business activities	45	38	100	61	51	31	72	45
Other industries	18	16	19	14	17	13	17	13

Table 5B. Domestic patents granted to enterprises and associations by industry (TOL 2008) in 2008

Industry	Patents	Enterprises
Total	668	268
C Manufacturing, total	467	145
10-12 Food industry	1	1
13-15 Textile, clothing, leather and footwear industry	5	3
16-17 Wood and paper industry	24	10
19-22 Chemical industry	20	15
24-25, 28-30 Metal and engineering industry	275	64
26-27 Electrical and electronics industry	124	37
Other manufacturing	22	18
D,E Electricity, gas and water supply	3	3
F Construction	10	8
G Wholesale and retail trade	34	17
J Information and communication	31	20
72 Scientific research and development	33	16
M Professional, scientific and technical activities (excl. 72)	71	44
Other industries	19	15

Table 6. European patents validated in Finland by IPC-section and resident country of assignee in 2008

Resident country of assignee	Total of patents	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	5210	1109	840	1251	212	201	244	463	890
Finland	143	24	21	23	11	9	5	18	32
Germany	1144	173	253	224	111	69	88	95	131
United States	1104	306	106	328	25	5	33	85	216
Switzerland	382	126	84	97	5	9	16	20	25
France	347	68	55	93	7	20	17	37	50
Japan	336	47	46	71	9	2	8	37	116
Great Britain	235	51	38	75	3	5	11	30	22
Sweden	234	43	42	32	11	25	11	28	42
Italy	208	45	50	50	4	7	16	10	26
Netherlands	168	47	25	41	1	6	1	26	21
Republic of Korea	124	4	1	10	2			10	97
Denmark	94	25	15	33	2	6	7	5	1
Total of other countries	691	150	104	174	21	38	31	62	111

Table 7A. Patents granted to finnish enterprises by European Patent Office by industry (TOL 2002) in 2007 and 2008

Industry	European Patent Office, 2007		European Patent Office, 2008	
	Patents	Enterprises	Patents	Enterprises
Total of industries	732	171	768	167
Total of manufacturing industries	649	126	675	108
Manufacture of food products and beverages	8	6	6	5
Manufacture of textiles and clothing	11	3	2	2
Manufacture of wood and wood products	12	6	14	6
Manufacture of chemicals and chemical products	52	19	65	14
Manufacture of metals, metal products, machinery and equipment	156	48	126	39
Manufacture of electrical and optical equipment	401	36	450	35
Other manufacturing industries	9	8	12	7
Electricity, gas and water supply			1	1
Construction	1	1	2	2
Wholesale and retail trade	8	7	7	7
Transport, storage and communication	17	4	18	3
Computer and related activities	6	4	14	10
Research and development	19	8	23	16
Other business activities	24	14	24	16
Other industries	8	7	4	4

Table 7B. Patents granted to Finnish enterprises by European Patent Office by industry (TOL 2008) in 2008

Industry	Patents	Enterprises
Total	768	167
C Manufacturing, total	641	110
10-12 Food industry	6	5
13-15 Textile, clothing, leather and footwear industry	2	2
16-17 Wood and paper industry	14	6
19-22 Chemical industry	38	15
24-25, 28-30 Metal and engineering industry	128	41
26-27 Electrical and electronics industry	432	28
Other manufacturing	25	15
D,E Electricity, gas and water supply	1	1
F Construction	2	2
G Wholesale and retail trade	9	7
J Information and communication	32	13
72 Scientific research and development	22	15
M Professional, scientific and technical activities (excl. 72)	23	15
Other industries	38	4

Figures

Figure 1. Patent applications filed in Finland by IPC section in 2008

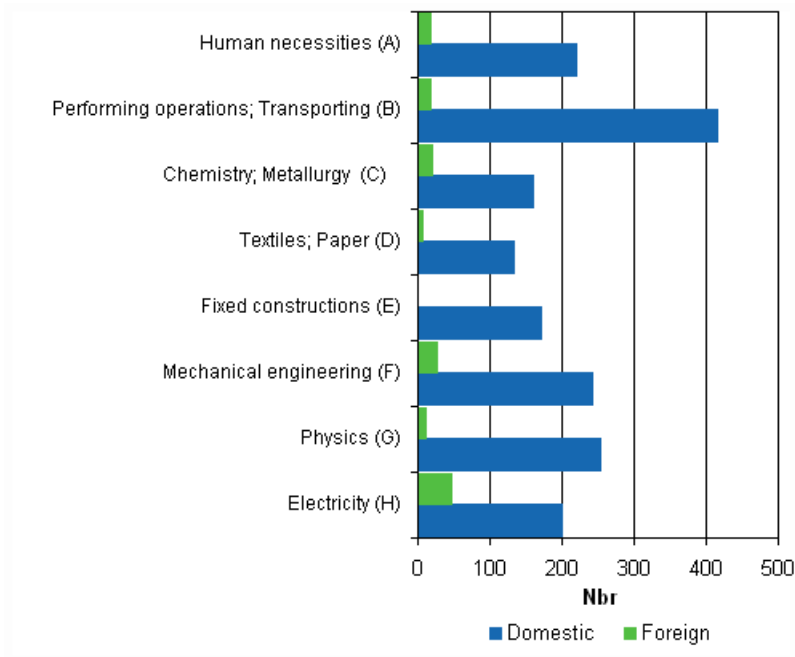


Figure 2. Patents granted and validated in Finland in 2002 - 2008

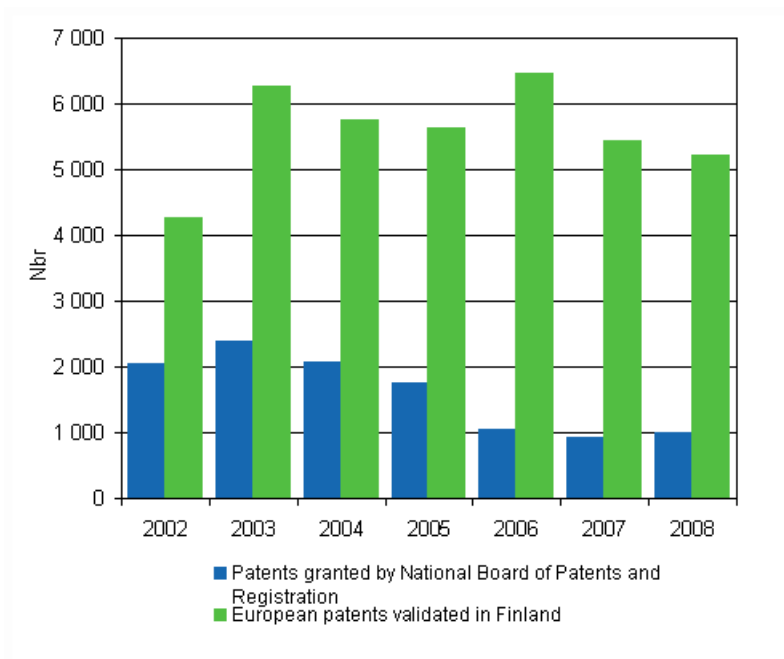


Figure 3. Patents granted in Finland 2008

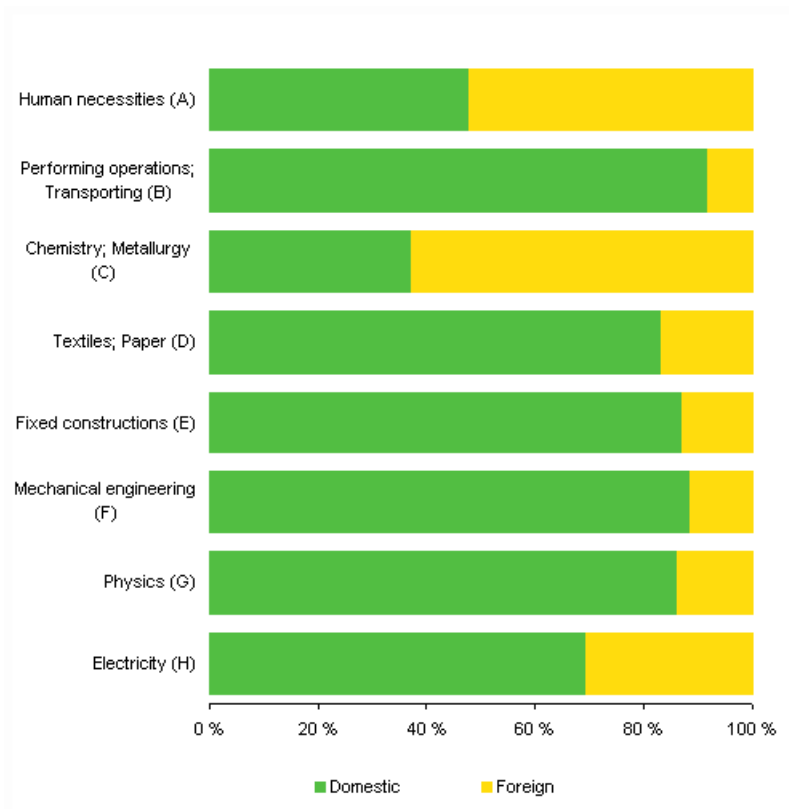


Figure 4. European patents validated in Finland in 2008

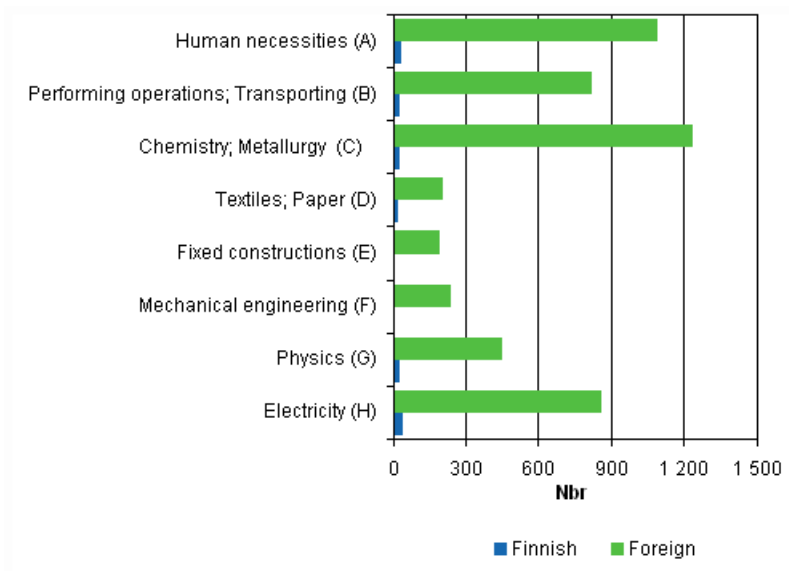
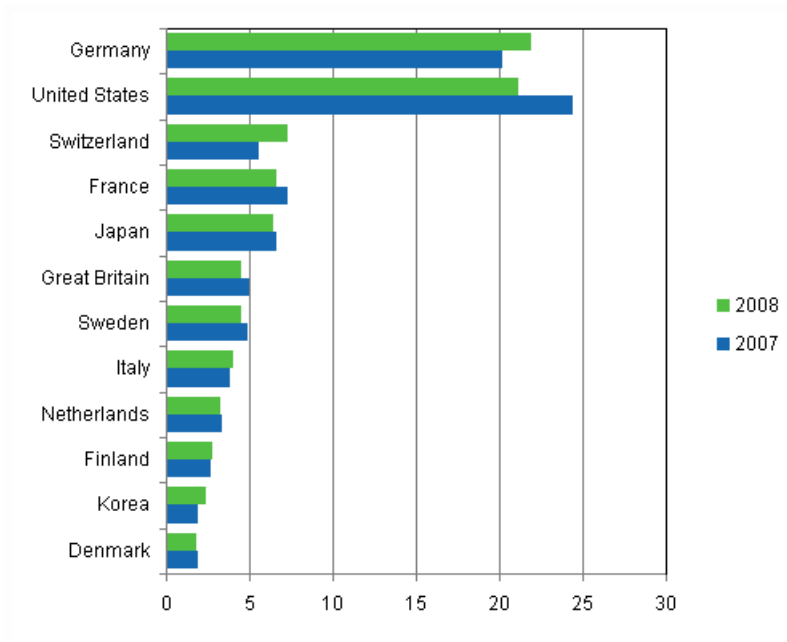


Figure 5. Selected countries shares of European patenting in 2007 and 2008



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