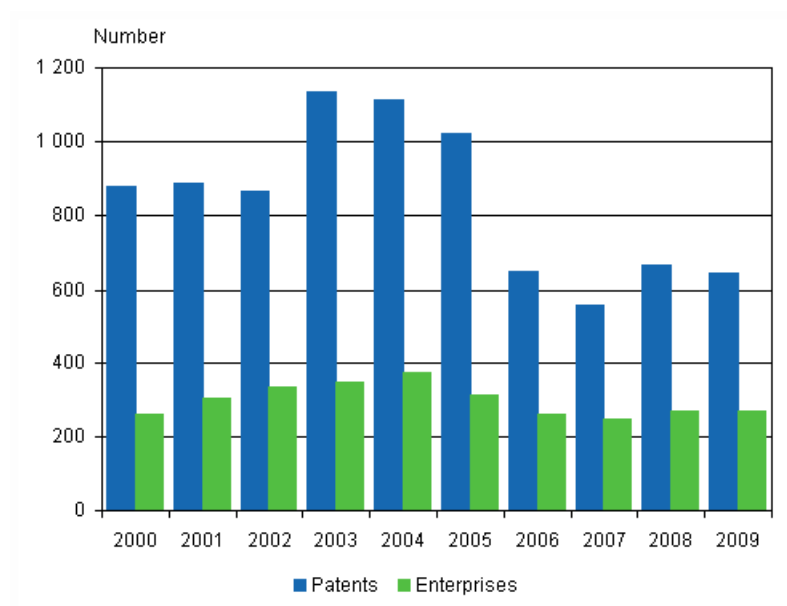


Patenting 2009

Number of domestic and European patents granted to enterprises down in 2009

The number of applications made by Finnish enterprises and associations for domestic patents remained on level with the previous year in 2009. The largest number of patent applications was made in the metal and engineering industry. By contrast, the number of domestic patents granted to Finnish enterprises and associations fell slightly from the previous year in 2009. The number of European patents granted to enterprises and associations also fell short of the previous year's level. One-half of the European patents were granted in the electronics industry. These data derive from statistics on patenting in 2009 published by Statistics Finland.

Domestic patents granted to enterprises and associations and enterprises having received patents, 2000– 2009



A total of 1,931 patent applications were filed in Finland in 2009. The vast majority of them - 1,804 applications, or 93 per cent of all applications - were domestic applications. Nearly one patent application in four concerned performing operations and transporting. Due to increased international patenting the

number of foreign applications made direct in Finland has been falling. The applicant was from abroad in 127 of the patent applications filed in Finland in 2009.

Domestic patenting by Finnish enterprises and associations remained on level with 2008 in 2009. In 2009, enterprises and associations filed a total of 1,403 patent applications, as against 1,397 in 2008. Patent applications were most numerous in the metal and engineering industry where they totalled 510, filed by 129 applicant enterprises. The number of patent applications went up in e.g. wholesale and retail trade, and in research and development activity, whereas e.g. in the forest industry, and in information and communication activity their number decreased from the previous year.

Approximately 40 per cent of the domestic patent applications made in 2009 were filed by inventors resident in the region of Uusimaa. The respective share for both Pirkanmaa and Varsinais-Suomi was just short of ten per cent.

A total of 1,055 patents were granted in Finland in 2009, which is nearly 60 patents more than in 2008. The growth in the total number was partly due to increased number of patents granted to foreign assignees. By contrast, the number of patents granted to domestic assignees fell. The number of patents granted to domestic enterprises and associations was 647, which was three per cent lower than in the previous year. The highest number of patents was granted to the metal and engineering industry and the most common IPC sections in which domestic patents were granted to Finnish enterprises were performing operations and transporting.

European patents granted by the European Patents Office (EPO) to Finnish enterprises or associations totalled 642 in 2009. The number of granted patents fell by 16 per cent from the previous year. The share of the electronics industry of the European patents granted to Finnish enterprises and associations was approximately one-half. The share of the metal and engineering industry was 20 per cent.

The United States Patent and Trademark Office granted altogether 990 patents to Finnish enterprises and associations in 2009. The vast majority, or 723 of them, were granted to the electronics industry. The metal and engineering industry was granted 125 patents.

A total of 4,497 European patents were validated in Finland in 2009, whereas in 2008 the respective number was 5,210. The main sections of the European patents were chemistry and metallurgy - 1,249 patents - and human necessities - 962 patents. Germany and the United States were the main assignee countries of the European patents validated in Finland.

A total of 479 utility design applications were made in Finland in 2009. The number of applications grew by some 14 per cent from the year before. The vast majority, or 450 of the applications, were made by domestic applicants of which just under 60 per cent were enterprises and associations. In relative terms, the applications for utility designs most usually concerned performing operations and transporting, human necessities and fixed constructions. As with domestic patent applications, the majority of the utility design applications were made in the metal and engineering industry.

Contents

Tables

Appendix tables

Appendix table 1. Patent applications filed in Finland, 1985, 1990, 1995 and 2000–2009.....	4
Appendix table 2. Domestic patent applications by region, 2005–2009.....	4
Appendix table 3. Domestic patent applications of enterprises and associations by industry (TOL 2008), 2008 and 2009.....	4
Appendix table 4. Patents granted in Finland by IPC section, 2009.....	5
Appendix table 5. Domestic patents granted to enterprises and associations by industry (TOL 2008), 2008 and 2009.....	6
Appendix table 6. European patents validated in Finland by IPC-section and resident country of assignee, 2009.....	6
Appendix table 7. Patents granted to Finnish enterprises and associations by European Patent Office by industry (TOL 2008), 2008 and 2009.....	7
Appendix table 8. Patents granted to Finnish enterprises by US Patent and Trademark Office by industry (TOL 2008), 2009	7
Appendix table 9A. Utility model applications filed in Finland by IPC section, 2008.....	8
Appendix table 9B. Utility model applications filed in Finland by IPC section, 2009.....	8
Appendix table 10. Domestic utility model applications of enterprises and associations by industry (TOL 2008), 2008 and 2009.....	8

Figures

Appendix figures

Appendix figure 1. Patent applications filed in Finland by IPC section, 2009.....	9
Appendix figure 2. Patents granted and validated in Finland, 2002– 2009.....	9
Appendix figure 3. Patents granted in Finland by IPC section, 2009.....	10
Appendix figure 4. European patents validated in Finland by IPC section, 2009.....	10
Appendix figure 5. Selected countries shares of European patents validated in Finland, 2008 and 2009.....	11

Appendix tables

Appendix table 1. Patent applications filed in Finland, 1985, 1990, 1995 and 2000–2009

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
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
2009	401	1403	1804	127	1931

Appendix table 2. Domestic patent applications by region, 2005–2009

Region	Year				
	2005	2006	2007	2008	2009
	Applications total	Applications total	Applications total	Applications total	Applications total
Regions Total	1828	1813	1801	1798	1804
Uusimaa	714	662	716	719	701
Itä-Uusimaa	32	14	34	16	26
Varsinais-Suomi	139	137	145	122	150
Satakunta	57	46	38	41	45
Kanta-Häme	49	39	35	35	54
Pirkanmaa	179	174	189	196	162
Päijät-Häme	51	68	59	64	63
Kymenlaakso	40	42	44	32	23
South Karelia	29	31	29	35	30
Etelä-Savo	34	35	34	42	43
Pohjois-Savo	84	77	70	63	85
North Karelia	45	49	34	31	40
Central Finland	120	154	110	107	111
South Ostrobothnia	21	24	23	25	16
Ostrobothnia	61	47	61	63	56
Central Ostrobothnia	4	8	5	11	8
North Ostrobothnia	137	110	106	95	95
Kainuu	13	12	7	13	16
Lappi	18	12	15	16	13
Åland	5	5	1	1	1
Unknown / Foreign countries	1	70	50	71	67

Appendix table 3. Domestic patent applications of enterprises and associations by industry (TOL 2008), 2008 and 2009

Industry	2008		2009	
	Applications	Number of enterprises	Applications	Number of enterprises
Total	1397	512	1403	532
C Manufacturing, total	852	248	834	267
10-12 Food industry	17	6	21	8
13-15 Textile, clothing, leather and footwear industry	4	2	1	1
16-17 Wood and paper industry	83	21	74	19
19-22 Chemical industry	68	29	65	31
24-25, 28-30 Metal and engineering industry	501	110	510	129
26-27 Electrical and electronics industry	132	48	108	48
Other manufacturing	47	32	55	31
D,E Electricity, gas and water supply	3	2	2	2
F Construction	25	21	25	20
G Wholesale and retail trade	59	42	68	50
J Information and communication	90	51	56	38
72 Scientific research and development	99	26	155	22
M Professional, scientific and technical activities (excl. 72)	166	76	156	86
Other industries	103	46	107	47

Appendix table 4. Patents granted in Finland by IPC section, 2009

IPC section	Total	Finnish assignees total	Finnish private assignees	Finnish enterprises and associations
Total of patents granted	1055	713	66	647
A: Human necessities	121	71	12	59
B: Performing operations, transporting	188	165	12	153
C: Chemistry, metallurgy	257	70	5	65
D: Textiles, paper	104	85	2	83
E: Fixed constructions	68	65	10	55
F: Mechanical engineering	81	70	10	60
G: Physics	98	83	10	73
H: Electricity	138	104	5	99

Appendix table 5. Domestic patents granted to enterprises and associations by industry (TOL 2008), 2008 and 2009

Industry	2008		2009	
	Patents	Number of enterprises	Patents	Number of enterprises
Total	668	268	647	269
C Manufacturing, total	467	145	473	163
10-12 Food industry	1	1	6	4
13-15 Textile, clothing, leather and footwear industry	5	3	5	3
16-17 Wood and paper industry	24	10	23	12
19-22 Chemical industry	20	15	41	25
24-25, 28-30 Metal and engineering industry	275	64	288	72
26-27 Electrical and electronics industry	124	37	96	37
Other manufacturing	18	15	14	10
D,E Electricity, gas and water supply	3	3	2	2
F Construction	10	8	10	8
G Wholesale and retail trade	34	17	33	19
J Information and communication	31	20	34	24
72 Scientific research and development	33	16	23	10
M Professional, scientific and technical activities (excl. 72)	71	44	54	31
Other industries	19	15	18	12

Appendix table 6. European patents validated in Finland by IPC-section and resident country of assignee, 2009

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	4497	962	657	1249	182	180	217	373	677
Finland	128	11	33	18	9	6	8	18	25
Germany	985	150	211	232	97	60	69	59	107
United States	963	237	67	330	20	4	26	96	183
Switzerland	353	116	48	102	1	4	23	45	14
France	335	56	57	104	8	17	17	30	46
Japan	271	28	31	65	11	1	9	29	97
Great Britain	191	63	28	51		6	9	14	20
Italy	186	44	39	58	1	10	10	10	14
Sweden	182	32	34	29	8	25	11	12	31
Netherlands	142	41	22	47	3	5	5	8	11
Belgium	91	19	16	36	1	6	4	6	3
Denmark	84	22	14	36	1	2	1	4	4
Republic of Korea	78		3	5	1		1	10	58
Austria	73	7	19	18	9	11	5	2	2
Canada	66	15	3	12	1	1	2	7	25
Total of other countries	369	121	32	106	11	22	17	23	37

Appendix table 7. Patents granted to Finnish enterprises and associations by European Patent Office by industry (TOL 2008), 2008 and 2009

Industry	European Patent Office 2008		European Patent Office 2009	
	Patents	Number of enterprises	Patents	Number of enterprises
Total	768	167	642	175
C Manufacturing, total	641	110	518	120
10-12 Food industry	6	5	4	3
13-15 Textile, clothing, leather and footwear industry	2	2		
16-17 Wood and paper industry	14	6	7	5
19-22 Chemical industry	38	15	28	17
24-25, 28-30 Metal and engineering industry	128	41	130	53
26-27 Electrical and electronics industry	432	28	324	27
Other manufacturing	25	15	25	15
D,E Electricity, gas and water supply	1	1	1	1
F Construction	2	2	2	2
G Wholesale and retail trade	9	7	6	5
J Information and communication	32	13	20	13
72 Scientific research and development	22	15	20	10
M Professional, scientific and technical activities (excl. 72)	23	15	25	17
Other industries	38	4	50	7

Appendix table 8. Patents granted to Finnish enterprises by US Patent and Trademark Office by industry (TOL 2008), 2009

Industry	US Patent and Trademark Office 2009	
	Patents	Number of enterprises
Total	990	134
C Manufacturing, total	887	83
10-12 Food industry		
13-15 Textile, clothing, leather and footwear industry	2	2
16-17 Wood and paper industry	3	3
19-22 Chemical industry	25	10
24-25, 28-30 Metal and engineering industry	125	33
26-27 Electrical and electronics industry	723	29
Other manufacturing	9	6
D,E Electricity, gas and water supply	1	1
F Construction		
G Wholesale and retail trade	5	3
J Information and communication	15	12
72 Scientific research and development	21	15
M Professional, scientific and technical activities (excl. 72)	37	13
Other industries	24	7

Appendix table 9A. Utility model applications filed in Finland by IPC section, 2008

IPC section	Domestic applications			Foreign applications	Applications total
	Private assignee	Enterprise/association	Total		
Total	174	225	399	23	422
A: Human necessities	59	36	95	3	98
B: Performing operations, transporting	36	45	81	4	85
C: Chemistry, metallurgy	4	3	7	1	8
D: Textiles, paper		12	12	7	19
E: Fixed constructions	31	50	81	2	83
F: Mechanical engineering	21	38	59	5	64
G: Physics	8	19	27		27
H: Electricity	13	22	35	1	36
Unknown	2		2		2

Appendix table 9B. Utility model applications filed in Finland by IPC section, 2009

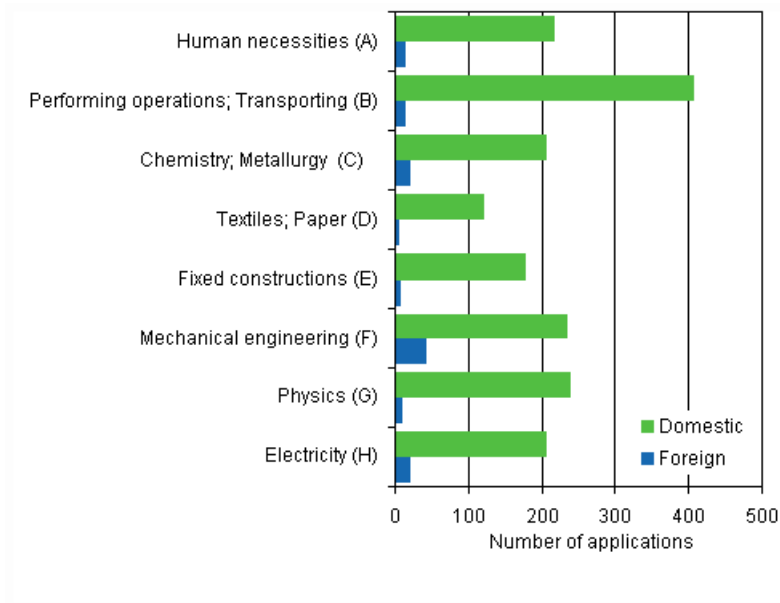
IPC section	Domestic applications			Foreign applications	Applications total
	Private assignee	Enterprise/association	Total		
Total	190	260	450	29	479
A: Human necessities	49	42	91	3	94
B: Performing operations, transporting	40	66	106	3	109
C: Chemistry, metallurgy	6	5	11		11
D: Textiles, paper	2	19	21	10	31
E: Fixed constructions	43	54	97	1	98
F: Mechanical engineering	28	27	55	4	59
G: Physics	5	18	23	3	26
H: Electricity	14	23	37	5	42
Unknown	3	6	9		9

Appendix table 10. Domestic utility model applications of enterprises and associations by industry (TOL 2008), 2008 and 2009

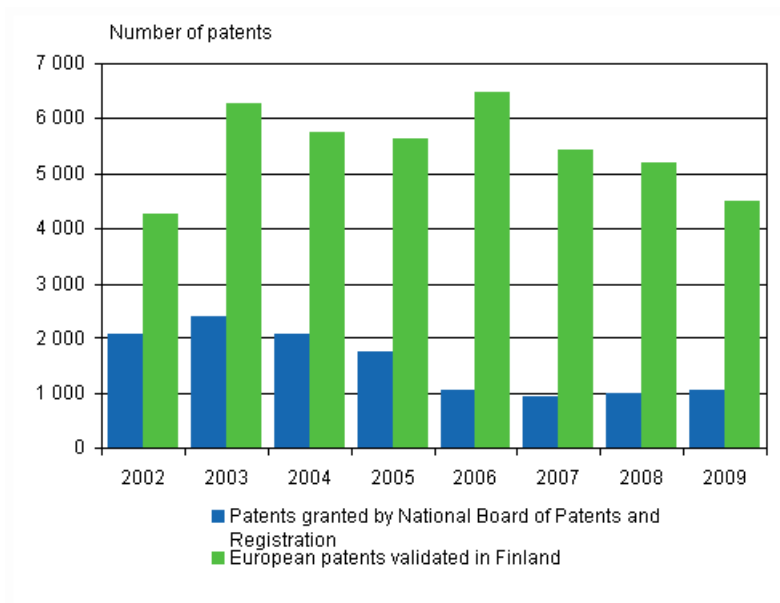
Industry	2008		2009	
	Applications	Number of enterprises	Applications	Number of enterprises
Total	225	168	260	174
C Manufacturing, total	139	93	176	103
10-12 Food industry	3	3	1	1
13-15 Textile, clothing, leather and footwear industry	5	5	2	2
16-17 Wood and paper industry	13	12	13	12
19-22 Chemical industry	10	6	16	12
24-25, 28-30 Metal and engineering industry	73	46	94	49
26-27 Electrical and electronics industry	22	10	22	8
Other manufacturing	13	11	28	19
F Construction	15	12	17	14
G Wholesale and retail trade	23	20	21	20
J Information and communication	10	9	5	5
72 Scientific research and development	2	1		
M Professional, scientific and technical activities (excl. 72)	26	24	31	23
Other industries	10	9	10	9

Appendix figures

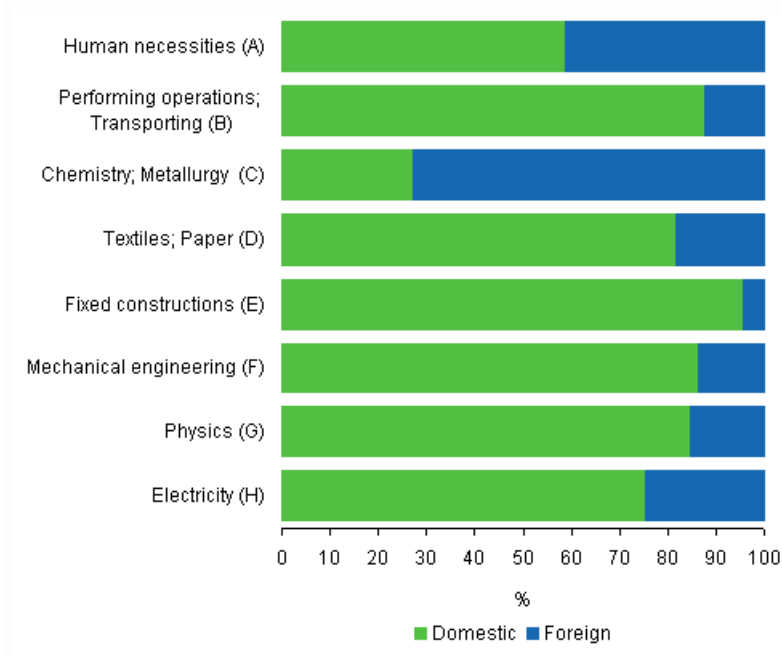
Appendix figure 1. Patent applications filed in Finland by IPC section, 2009



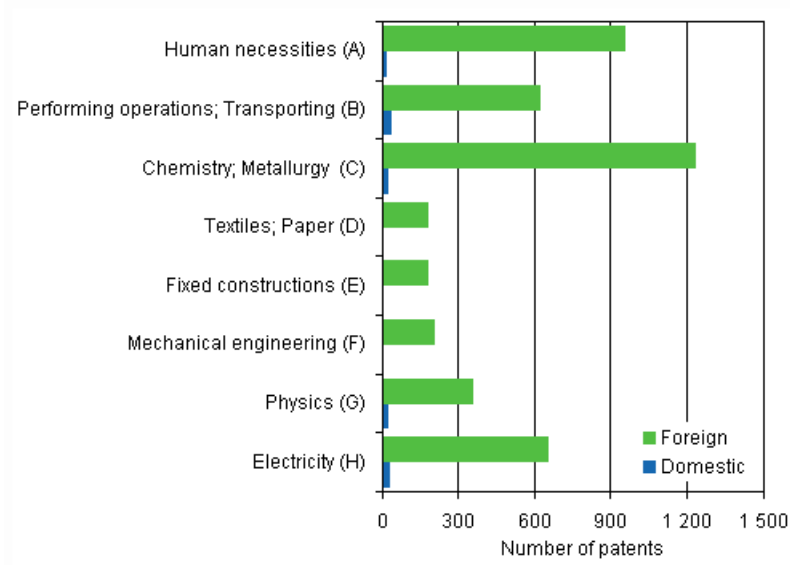
Appendix figure 2. Patents granted and validated in Finland, 2002–2009



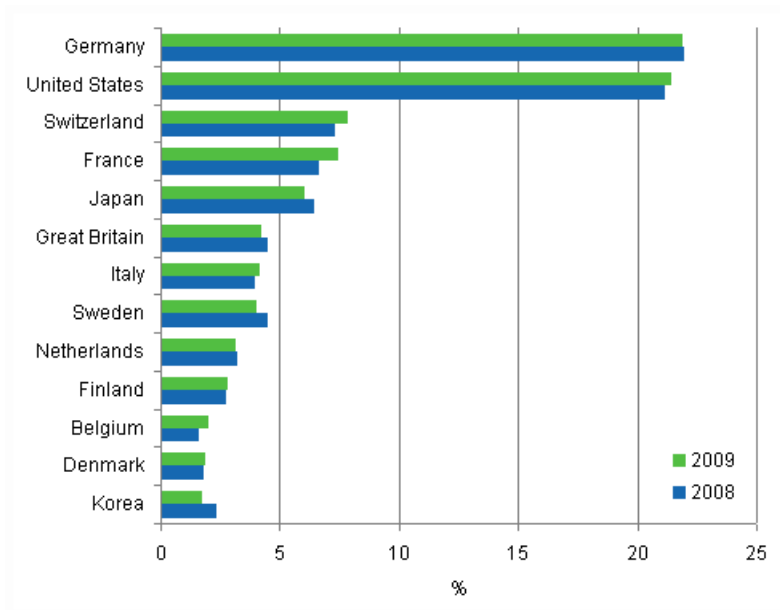
Appendix figure 3. Patents granted in Finland by IPC section, 2009



Appendix figure 4. European patents validated in Finland by IPC section, 2009



Appendix figure 5. Selected countries shares of European patents validated in Finland, 2008 and 2009



Suomen virallinen tilasto
Finlands officiella statistik
Official Statistics of Finland

Science, Technology and Information Society 2010

Inquiries

Mervi Niemi (09) 1734 3263

Kari-Pekka Niemi (09) 1734 3399

Director in charge:

Leena Storgårds

tiede.teknologia@stat.fi

www.stat.fi