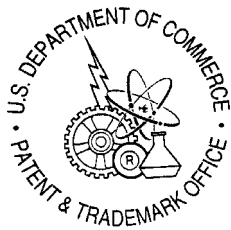


# PATENT COUNTS BY CLASS BY YEAR

JANUARY 1977 -- DECEMBER 1998



March 1999  
U.S. PATENT AND TRADEMARK OFFICE  
OFFICE FOR PATENT AND TRADEMARK INFORMATION / TAF PROGRAM  
PK3 - Suite 441, WASHINGTON, DC 20231  
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*A TECHNOLOGY ASSESSMENT AND FORECAST REPORT*

## Background

Classes are major divisions of technology in the U.S. Patent Classification System (USPCS). Each class is further divided into smaller divisions of technology called subclasses. The USPCS currently contains approximately 440 total classes and 140,000 total subclasses. Copies of each patent are placed (classified) in those subclasses which have been identified as pertinent to the information disclosed in the patent. One, and only one, of these subclasses is designated as the "original classification" (OR), and the remainder (if any) are designated as "cross-reference classifications" (XR). Counting patents by original classifications will ensure that each patent is counted only once. However, if a patent teaches more than one concept, e.g., table and chair, only one concept, e.g., table, will be counted. To ensure that all concepts are counted, patents should be counted in all of their classifications.

This report counts all patent documents including utility, design, plant, and reissue patents as well as statutory invention registrations and defensive publications.

## Part I

Part I (OR's only) considers only the original classification of each patent. If the patent record is incomplete and contains no OR designation, the patent is counted in "dummy" class 1 or "dummy" design Class D00.

## Part II

Part II (OR's + XR's, Duplicates Eliminated) looks at original and cross-reference classifications. Duplicate counts are eliminated within each class, but not among classes. For example, the same patent could be counted in Class 2 and Class 4 if it contained disclosure relating to both classes. If the patent record contains no classification data, the patent is counted in "dummy" Class 1 or "dummy" design Class D00.

PART I

PATENT COUNTS BY CLASS BY YEAR

ORIGINAL CLASSIFICATIONS ONLY

1/1/1977 - 12/31/1998



















## PATENTS GRANTED BY CLASS BY YEAR (ORs only)

CLASS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
707	21	25	14	16	15	19	20	47	47	40	48	55	95	101	100	151	212	256	341	472	549	1137	3781
711	79	70	55	56	66	69	87	129	116	108	115	135	162	150	139	219	258	358	403	563	563	835	4735
800	3	2	1	1	4	2	5	2	7	14	16	20	18	12	26	41	33	90	86	235	264	404	1286
D01	4	9	12	12	5	6	15	3	8	18	17	24	16	34	58	79	50	36	35	55	43	46	585
D02	85	95	60	122	127	107	112	115	174	135	174	254	224	236	272	345	451	433	324	358	502	708	5413
D03	78	125	100	102	154	154	149	125	182	143	154	138	126	269	318	278	320	322	332	357	364	437	4727
D04	17	27	14	13	19	33	26	46	39	52	64	44	39	69	75	73	111	87	138	120	100	127	1333
D05	30	9	11	17	33	31	25	4	3	5	4	20	26	12	23	9	13	7	30	22	33	45	412
D06	449	500	386	444	545	563	521	538	595	601	609	630	508	650	833	870	1237	1008	1307	1338	1111	1470	16713
D07	234	234	219	305	307	303	277	283	297	418	368	328	352	433	422	445	607	600	557	724	573	738	9024
D08	255	225	175	232	290	306	269	356	261	321	370	419	449	517	609	694	738	748	752	750	742	1009	10487
D09	162	219	138	253	317	262	237	259	276	290	277	231	238	485	550	424	496	520	532	487	549	665	7867
D10	201	201	172	214	195	205	196	190	205	185	241	203	242	379	572	476	508	583	693	470	523	696	7550
D11	129	169	125	159	192	192	152	122	149	154	130	89	167	180	246	218	308	285	381	333	376	411	4667
D12	262	202	179	191	235	241	284	295	278	330	432	355	437	548	558	539	664	661	594	680	800	1022	9787
D13	74	67	49	68	84	103	94	114	103	114	97	118	146	220	329	318	267	300	304	286	279	440	3974
D14	217	236	158	197	260	331	236	347	436	401	507	483	526	747	799	663	879	953	999	995	983	1251	12604
D15	125	103	82	117	105	153	157	200	171	157	154	163	155	216	140	267	282	221	305	240	220	319	4052
D16	122	69	48	58	66	80	73	106	55	81	88	91	73	159	166	186	176	211	203	262	240	390	3003
D17	15	21	11	46	41	31	44	25	53	26	29	29	20	68	81	46	41	64	38	33	39	55	856
D18	67	78	64	61	117	122	94	105	178	165	138	130	116	196	276	176	195	186	205	218	204	201	3292
D19	58	88	95	90	112	102	101	88	105	129	103	101	134	193	247	268	280	220	294	177	228	310	3523
D20	30	33	17	29	22	28	40	48	56	50	49	57	29	83	105	73	107	125	102	73	137	160	1453
D21	298	307	278	332	440	466	378	372	469	422	474	404	528	580	759	699	669	857	873	728	740	998	12071
D22	58	61	42	112	98	49	114	89	53	76	96	99	153	93	88	146	129	159	165	187	132	166	2365
D23	182	153	168	195	230	272	226	266	204	291	340	324	247	383	591	522	440	562	564	534	552	786	8032
D24	186	165	107	150	193	270	223	284	214	318	309	256	303	258	365	423	431	478	510	483	450	521	6897
D25	167	99	129	83	138	104	90	147	40	106	89	76	165	149	149	147	236	248	258	255	292	306	3473
D26	96	91	91	59	113	117	109	104	112	153	187	156	198	199	305	280	258	356	374	464	429	531	4782
D27	62	55	15	26	35	27	29	21	11	22	26	25	16	23	25	8	17	31	31	38	38	79	660
D28	64	58	58	77	95	59	93	85	116	128	85	116	152	241	146	102	127	198	148	152	158	196	2654
D29	23	16	11	29	10	29	16	22	35	27	23	33	27	55	46	48	64	70	85	75	73	67	884
D30	75	44	23	57	48	41	47	30	44	29	71	71	46	60	89	93	124	130	123	128	124	105	1602
D32	43	48	27	43	60	56	65	66	70	76	141	103	99	156	163	108	130	186	189	176	193	211	2409
D34	47	41	40	36	49	66	54	62	50	71	77	94	110	110	139	202	217	205	196	169	130	215	2380
D99	15	15	15	20	11	35	17	21	24	24	37	17	26	24	23	44	60	46	72	44	55	69	714
PLT	173	186	132	117	183	173	197	212	242	224	229	425	587	318	353	321	442	499	387	362	390	561	6713
TOTAL	69886		52498		71113		62016		77273		89598		102690		106842		109890		113955		124146		2019644
		70604		66219		63307		72680		77040		84439		99219		107511		113704		121806		163208	

PART II

PATENT COUNTS BY CLASS BY YEAR

ORIGINAL AND CROSS REFERENCE CLASSIFICATIONS

(DUPLICATES ELIMINATED)

1/1977 - 12/31/1998









## PATENTS GRANTED BY CLASS BY YEAR (ORs + XRs)

CLASS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
216	134	139	86	110	167	175	170	191	202	225	223	195	284	309	309	300	465	426	424	382	482	534	5932
217	36	30	25	34	26	18	13	31	18	20	26	25	24	22	12	13	16	16	7	8	7	14	441
218	94	101	35	80	92	70	94	131	115	85	124	85	64	58	57	62	49	53	43	75	43	94	1704
219	854	860	631	835	873	958	837	1012	1213	1041	1258	1090	1299	1199	1122	1092	1131	1162	1017	1004	921	1288	22697
220	646	638	541	637	627	631	503	640	694	713	774	825	1048	974	975	948	1001	948	915	960	886	1121	17645
221	180	177	132	174	173	146	133	181	163	194	248	190	219	214	235	226	224	208	216	231	157	251	4272
222	725	679	616	699	641	567	518	666	754	709	802	724	918	953	972	907	926	1057	917	844	832	1030	17456
223	75	60	45	51	56	43	30	52	56	75	79	62	74	78	107	86	50	48	71	79	106	86	1469
224	176	189	135	170	253	174	184	234	179	167	213	292	378	372	389	334	375	370	405	444	458	523	6414
225	53	69	38	56	72	52	49	68	63	62	73	65	69	62	74	96	64	70	51	54	45	72	1377
226	259	191	158	186	181	191	157	195	165	168	171	173	209	154	157	159	150	162	142	129	99	172	3728
227	95	97	65	106	92	87	114	126	148	175	141	123	129	104	129	122	129	137	156	164	182	180	2801
228	297	289	214	284	239	269	226	306	341	421	403	375	485	360	415	463	460	434	411	398	358	386	7834
229	277	307	204	320	320	252	244	244	257	257	304	350	407	384	414	359	365	383	326	310	275	354	6913
231	1	3	4	3	0	1	3	2	3	0	1	1	2	1	2	3	0	1	0	0	1	0	32
232	26	34	27	25	26	32	28	21	35	19	44	42	50	54	56	45	35	30	47	35	43	41	795
234	9	7	6	4	5	1	1	3	3	7	4	2	2	1	1	5	2	1	0	0	2	2	68
235	257	251	193	198	220	222	174	207	237	268	352	382	556	402	419	419	488	504	595	596	556	764	8260
236	163	166	133	194	234	220	202	211	232	167	196	157	192	174	137	155	174	165	131	129	113	147	3792
237	124	167	144	74	114	125	121	120	117	89	111	95	103	99	80	72	73	66	40	53	47	78	2112
238	27	44	28	49	59	37	40	38	31	32	40	43	39	49	37	47	29	25	31	41	32	48	846
239	541	577	478	647	614	524	529	552	596	619	677	656	760	790	733	737	744	788	615	580	658	901	14316
241	321	288	213	303	256	212	227	202	267	322	353	300	321	298	320	304	356	364	334	342	307	369	6579
242	694	652	525	556	512	515	520	633	686	616	701	726	701	674	590	544	640	779	575	706	611	812	13968
244	404	341	260	296	296	260	352	371	352	364	482	433	485	449	535	573	454	437	369	355	331	572	8771
245	9	13	6	6	8	7	10	14	4	3	6	6	9	3	7	7	12	6	5	5	6	3	155
246	51	56	26	43	43	49	28	28	28	26	45	40	43	57	46	45	37	51	58	54	59	76	989
248	787	831	536	780	729	682	663	803	893	939	1191	1076	1374	1301	1415	1353	1226	1220	1147	1231	1185	1577	22939
249	211	204	135	146	144	126	126	147	165	148	184	192	222	165	170	177	156	147	140	132	150	199	3586
250	1145	1091	839	1047	1162	945	883	1117	1249	1339	1916	1691	2203	2035	2148	2081	1905	1962	1893	1772	1654	2028	34105
251	469	566	420	591	627	526	441	597	820	649	793	642	789	746	679	720	674	681	559	567	501	708	13765
252	1132	1176	806	1007	1026	847	1052	1127	1156	1065	1128	1074	1285	1158	1338	1390	1311	1265	1197	1259	1140	1342	25281
254	263	239	167	218	232	179	163	276	242	221	241	208	250	210	182	229	219	194	198	174	201	199	4705
256	73	75	50	57	70	46	39	41	58	43	72	54	79	77	78	79	64	70	82	96	98	100	1501
257	808	712	631	734	725	614	632	729	936	1000	1176	1119	1500	1577	1881	1741	1650	2168	2093	2186	2246	3258	30116
258	1	1	1	0	0	1	2	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	10
260	152	159	93	127	132	73	77	63	71	63	28	28	29	21	23	32	26	20	17	19	31	34	1318
261	434	428	345	416	443	342	328	331	293	256	250	253	258	261	261	270	235	196	202	212	206	240	6460
264	1394	1684	1097	1392	1765	1319	1410	1470	1459	1358	1515	1651	2098	1938	2042	2098	2091	1799	1758	1790	1942	2390	37460
266	301	270	198	244	249	235	300	266	201	235	238	238	224	201	217	213	221	245	218	161	159	185	5019
267	196	200	147	132	161	145	165	215	233	297	372	373	400	291	303	290	290	282	222	247	215	239	5415
269	157	204	149	206	186	151	178	206	275	243	321	254	330	292	240	288	255	247	192	233	218	300	5125
270	45	51	49	31	39	21	44	65	95	73	53	80	78	94	120	125	76	89	89	83	83	118	1601
271	354	269	231	271	280	308	257	346	375	402	436	392	459	410	530	640	589	498	478	444	406	433	8808
273	410	332	254	370	357	319	247	303	328	261	308	306	437	407	472	463	430	516	497	463	479	596	8555
277	245	355	261	337	355	319	327	426	421	356	373	331	440	354	404	411	350	350	286	382	326	242	7651
278	0	0	0	0	0	1	0	2	2	0	0	0	0	0	1	0	0	1	0	0	1	0	8
279	93	102	56	106	102	65	89	82	114	150	159	114	152	114	136	107	105	136	115	102	83	144	2426
280	796	846	649	736	767	729	693	777	794	918	979	986	1157	1074	1252	1152	1250	1433	1396	1515	1234	1661	22794
281	32	31	42	28	41	31	44	68	72	89	87	65	106	113	124	94	98	81	104	79	99	121	1649
283	56	59	64	77	92	77	73	117	146	150	150	115	170	200	179	202	205	209	208	190	201	296	3236

## PATENTS GRANTED BY CLASS BY YEAR (ORS + XRS)

CLASS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
285	418	469	346	402	458	351	359	466	459	556	627	474	623	515	519	560	467	588	451	416	364	503	10391
289	17	19	10	17	6	10	13	4	15	12	12	7	12	7	9	11	6	6	15	15	16	13	252
290	94	111	90	121	134	116	88	143	112	79	104	95	103	77	76	77	40	68	62	59	66	124	2039
291	4	3	2	2	3	3	0	2	1	2	0	7	3	3	0	2	0	1	0	3	0	0	41
292	256	291	180	252	216	209	206	266	237	257	370	277	383	375	404	345	279	236	266	361	318	370	6354
293	56	56	37	45	49	41	44	42	29	42	62	38	52	67	50	68	52	43	38	38	35	50	1034
294	328	319	240	319	333	241	251	343	327	368	451	405	438	359	367	353	341	327	334	331	321	403	7499
295	9	9	3	7	3	10	6	7	5	6	9	5	3	7	7	4	2	3	4	7	6	3	125
296	267	323	238	277	294	270	252	311	299	321	467	452	543	592	624	503	464	466	419	544	489	689	9104
297	323	347	206	345	290	250	262	340	390	467	547	494	626	528	505	525	457	694	562	729	685	817	10389
298	42	47	24	33	28	34	31	22	28	41	38	19	40	33	54	34	32	27	38	33	17	31	726
299	166	225	164	204	231	146	161	183	137	110	144	125	134	112	104	121	108	64	72	58	64	71	2904
300	8	10	7	12	8	14	7	8	7	14	18	18	18	19	22	24	11	10	16	15	22	18	306
301	81	79	56	74	87	72	57	77	71	84	82	81	87	100	104	103	92	97	98	128	98	122	1930
303	179	197	107	154	131	129	103	131	126	157	255	282	294	235	252	246	285	280	276	270	245	294	4628
305	49	77	40	44	46	32	29	57	37	36	37	21	47	27	26	21	33	39	38	26	25	47	834
307	305	310	226	267	277	313	273	296	264	271	411	377	442	318	324	330	377	339	400	546	538	739	7943
310	567	573	379	524	528	611	566	682	689	730	847	713	822	733	791	826	775	771	701	704	804	1236	15572
312	268	344	205	251	269	204	208	281	222	281	294	341	363	327	284	327	372	343	373	377	369	496	6799
313	473	443	340	346	387	412	334	402	451	456	554	573	602	590	571	547	466	436	480	564	621	909	10957
314	7	1	3	0	1	0	0	0	1	1	0	1	0	2	0	1	1	1	0	0	0	0	20
315	430	452	358	427	402	414	395	388	438	373	569	457	477	572	652	513	447	493	558	527	463	670	10475
318	494	562	329	412	537	521	522	667	669	632	769	624	726	671	641	636	689	646	628	658	624	946	13603
320	71	56	59	83	64	78	81	65	65	92	122	75	77	66	79	136	164	178	163	221	376	353	2724
322	55	54	38	57	57	58	68	79	49	58	93	68	56	56	73	56	61	53	34	76	83	98	1380
323	225	143	137	154	217	255	177	246	256	288	415	267	334	309	271	273	237	260	296	361	417	469	6007
324	767	734	493	583	690	651	579	740	847	936	1299	1221	1539	1266	1351	1286	1268	1275	1521	1764	1510	1589	23909
326	151	104	89	91	112	116	132	170	194	244	319	288	357	359	439	421	352	462	499	532	440	553	6424
327	865	745	530	659	686	660	618	656	735	799	953	744	910	829	944	1010	827	1141	1233	1297	1045	1531	19417
329	51	53	39	36	61	69	43	75	98	125	74	55	108	62	69	91	66	80	105	99	112	115	1686
330	340	287	202	233	291	276	235	350	398	305	297	312	362	281	330	366	283	380	384	345	342	445	7044
331	307	281	154	188	209	241	173	222	267	325	278	218	316	236	268	305	225	269	293	317	287	385	5764
332	40	31	22	38	28	43	28	42	71	72	59	57	49	49	66	73	58	70	92	100	73	107	1268
333	390	320	241	314	394	321	284	368	383	419	474	450	442	383	487	462	409	463	438	447	407	589	8885
334	47	34	30	39	43	19	19	26	27	26	13	10	13	9	8	4	3	3	9	5	2	10	399
335	274	245	164	226	233	218	226	236	303	272	372	291	341	317	310	271	264	305	259	293	241	270	5931
336	154	128	112	124	132	128	115	159	183	140	184	144	205	170	156	141	132	178	165	171	130	214	3365
337	186	156	116	109	137	160	126	95	153	103	140	118	142	111	92	103	98	66	58	64	99	127	2559
338	287	235	196	251	268	290	230	291	276	247	334	329	315	308	274	258	253	229	143	177	176	221	5588
340	998	969	661	973	971	942	847	864	1057	1128	1426	1361	1849	1498	1447	1391	1397	1554	1779	1972	1982	2554	29620
341	283	260	181	229	219	249	240	233	330	386	348	297	435	417	432	373	439	373	465	501	650	813	8153
342	396	370	273	327	216	250	161	193	239	284	377	268	345	363	398	415	420	513	485	594	513	658	8058
343	179	228	143	200	164	188	133	176	204	213	260	271	330	236	255	253	311	272	292	354	330	422	5414
345	208	268	186	254	257	249	251	318	341	378	635	590	776	682	665	746	892	1165	1353	1711	1890	3039	16854
346	164	173	126	170	172	178	223	198	241	236	245	252	276	295	229	249	253	190	142	94	40	67	4213
347	218	215	161	220	263	314	348	330	447	432	558	580	654	682	578	780	789	758	895	1095	1075	1586	12978
348	506	482	411	616	624	583	634	622	897	1069	1426	1188	1402	1291	1424	1470	1508	1627	1678	2082	1915	2693	26148
349	117	111	66	120	101	70	130	123	144	133	267	234	306	280	330	415	370	402	446	580	588	882	6215
351	100	97	101	103	152	89	120	113	149	143	193	196	283	226	235	233	222	217	260	261	275	370	4138
352	146	148	112	124	89	66	66	46	73	66	66	44	45	67	75	56	51	41	43	63	45	56	1588
353	93	145	90	88	76	65	73	82	56	59	69	68	80	102	91	93	110	107	124	121	137	172	2101

PATENTS GRANTED BY CLASS BY YEAR (ORs + XRs)

CLASS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
355	259	321	204	261	272	253	224	288	276	345	389	362	387	447	425	352	232	268	266	207	302	386	6726
356	556	581	463	618	708	516	553	592	737	780	1243	1029	1229	1026	1196	1199	1160	1206	1252	1213	1184	1652	20693
358	119	134	108	148	192	184	194	232	364	354	554	509	641	676	630	752	850	932	830	911	864	1398	11576
359	822	853	601	726	846	665	721	852	963	975	1310	1334	1535	1560	1682	1713	1608	1656	1555	1960	1924	2656	28517
360	450	440	391	435	429	543	587	600	749	908	1102	944	1263	955	1057	1050	1181	1225	1217	1230	1216	1641	19613
361	809	768	569	664	645	776	670	875	962	920	1241	1130	1400	1203	1230	1416	1322	1342	1530	1767	1630	2334	25203
362	296	331	270	366	353	317	302	348	383	404	462	538	633	650	720	681	585	661	786	776	809	1014	11685
363	273	193	154	189	249	262	185	292	253	298	460	349	410	341	328	316	281	330	329	376	519	576	6963
364	930	876	671	844	846	904	964	1284	1355	1401	1641	1640	2301	2029	1998	2193	2550	2853	3177	3724	2324	2389	38894
365	331	375	292	277	261	277	348	361	360	465	534	539	763	641	711	642	871	1294	1187	1311	1406	1910	15156
366	286	329	266	326	277	271	251	302	314	263	294	337	392	340	279	293	308	343	335	360	285	359	6810
367	288	232	166	326	271	243	198	231	264	245	410	306	422	453	358	370	345	300	280	312	274	327	6621
368	258	312	174	290	283	181	215	245	164	121	185	161	175	152	162	142	175	170	129	153	160	203	4210
369	198	241	172	215	193	301	278	352	434	355	480	483	707	524	706	841	880	830	911	1074	1105	1407	12687
370	240	205	142	180	204	240	259	275	408	393	497	506	587	572	561	626	736	1086	1281	1563	1437	2179	14177
371	102	101	74	108	118	158	156	171	243	262	370	327	430	335	356	395	442	533	774	772	671	984	7882
372	176	168	128	199	163	198	157	208	251	294	403	493	654	544	609	593	626	767	614	497	494	725	8961
373	118	105	93	83	112	91	112	136	91	112	121	84	76	55	53	62	83	78	74	82	47	66	1934
374	203	197	147	162	196	185	181	251	255	264	237	256	304	216	259	266	252	240	159	151	213	294	4888
375	282	263	146	230	232	294	273	351	409	471	515	443	605	482	556	613	685	858	972	1189	1114	1585	12568
376	402	385	245	307	402	284	237	287	274	377	678	464	414	295	335	361	366	355	247	225	189	236	7365
377	260	263	208	252	251	178	198	168	231	174	232	153	218	185	208	186	166	152	162	136	110	128	4219
378	259	286	226	257	215	231	189	245	249	255	333	266	375	359	424	383	370	318	372	430	372	434	6848
379	436	372	261	269	297	308	284	376	402	474	562	579	722	661	586	554	602	800	962	1118	978	1570	13173
380	38	61	70	81	63	75	63	79	81	130	173	158	208	239	252	267	356	376	376	400	453	686	4685
381	240	186	156	192	184	196	222	276	241	240	255	226	333	281	295	281	344	324	376	395	460	677	6380
382	95	102	91	84	98	97	95	146	217	228	323	334	436	428	582	566	575	600	624	826	989	1790	9326
383	94	121	108	116	136	104	103	133	177	167	205	225	295	269	296	203	203	208	216	221	176	253	4029
384	323	294	186	302	290	275	245	320	407	379	414	397	466	448	452	427	409	385	383	424	366	486	8078
385	171	233	192	266	260	182	263	313	304	299	598	809	789	781	925	853	841	870	784	786	895	1166	12580
386	112	91	84	122	107	137	158	210	245	198	282	297	341	226	238	261	288	282	289	414	330	442	5154
388	55	59	48	52	81	48	53	56	66	72	71	49	76	54	62	45	58	80	65	63	68	104	1385
392	146	146	111	124	140	155	140	127	153	150	165	147	171	133	118	156	161	168	148	132	131	183	3205
395	253	241	190	229	263	287	349	483	463	515	608	619	855	792	811	1078	1278	1622	2056	3075	3400	6094	25561
396	547	605	480	602	617	606	418	554	540	427	548	507	604	599	653	604	672	678	621	864	891	1183	13820
399	340	342	258	277	363	337	379	378	443	489	517	468	608	719	839	897	902	856	793	1078	923	1354	13560
400	262	212	179	275	293	262	315	343	415	417	492	458	523	446	482	472	426	351	361	381	344	477	8186
401	117	106	102	142	111	106	94	93	157	149	159	177	211	256	286	225	181	216	147	172	128	214	3549
402	16	20	21	24	36	17	27	32	33	50	40	35	58	51	62	41	53	52	53	44	63	79	907
403	531	687	411	571	536	528	505	632	696	797	873	704	865	759	740	761	693	643	643	687	718	759	14739
404	117	172	85	121	131	134	103	114	126	157	180	174	190	213	194	178	214	199	218	218	192	208	3638
405	458	526	313	349	432	398	355	472	388	413	575	413	517	510	559	497	556	462	466	557	421	569	10206
406	143	123	104	123	115	99	110	134	143	103	125	103	133	112	113	102	107	63	57	90	63	73	2338
407	75	79	48	77	96	69	36	75	65	112	97	71	83	101	136	116	116	90	65	73	97	131	1908
408	180	208	120	168	174	144	141	169	213	293	297	237	261	238	299	263	193	239	187	177	215	285	4701
409	126	108	92	101	119	104	92	115	174	225	234	194	209	186	186	209	165	148	148	119	178	189	3421
410	75	98	44	73	72	65	82	68	70	61	72	87	102	93	109	88	73	71	105	93	73	107	1781
411	264	267	167	227	247	199	212	258	273	274	399	344	426	412	374	359	377	320	325	382	370	442	6918
412	11	15	23	19	20	13	21	19	27	25	29	23	25	39	38	41	34	31	40	26	38	28	595
413	38	20	14	30	17	28	25	26	27	31	32	25	35	21	33	27	22	26	6	14	15	26	538
414	956	838	542	660	804	616	673	706	847	838	960	919	893	908	963	879	818	832	830	800	774	866	17922

PATENTS GRANTED BY CLASS BY YEAR (ORs + XRs)

CLASS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
415	289	243	218	273	307	217	266	291	319	229	346	347	350	271	258	358	377	348	312	365	292	328	6604
416	248	238	188	221	264	235	198	262	286	251	304	277	301	233	207	269	311	294	249	278	208	251	5573
417	442	495	378	495	488	428	521	606	714	539	562	662	734	571	653	693	706	628	512	652	532	618	12629
418	207	165	104	138	118	119	156	198	237	181	199	195	195	200	220	241	199	206	199	206	160	200	4043
419	115	115	68	82	87	87	91	110	111	199	170	177	187	248	229	185	113	181	187	159	137	162	3200
420	261	253	196	207	174	148	211	229	213	269	249	267	341	279	333	315	264	287	268	240	200	262	5466
422	828	764	562	834	1024	854	723	746	707	717	849	841	1071	958	1062	1292	1321	1320	1336	1266	1220	1582	21877
423	1252	1264	895	1048	1202	923	969	928	1083	865	919	865	1074	950	1083	1136	1089	1029	946	870	855	985	22230
424	660	636	571	644	702	731	610	777	743	778	961	1022	1522	1391	1619	1691	1799	1791	1882	2278	3381	4085	30274
425	832	796	596	668	834	599	712	724	794	751	835	905	981	850	932	969	964	831	850	839	886	1074	18222
426	704	666	579	729	766	656	674	630	797	647	732	793	1157	1030	999	906	899	822	882	897	806	976	17747
427	1451	1668	1164	1470	1768	1465	1490	1532	1779	1657	1867	1736	1966	1793	1783	1893	1858	1859	1732	1818	1929	2302	37980
428	2133	2343	1698	2168	2474	2188	2226	2359	2603	2619	2749	2835	3455	3300	3143	3390	3315	3352	3295	3530	3671	4283	63129
429	400	423	262	390	365	323	336	345	359	311	328	330	355	339	334	387	451	491	550	678	664	681	9102
430	895	834	569	796	1225	847	866	990	1027	1063	1058	1080	1447	1490	1551	1389	1807	1939	1773	1780	1686	2049	28161
431	279	315	206	217	278	218	283	334	281	265	282	235	288	299	238	276	277	251	285	266	219	318	5910
432	318	265	211	294	321	288	298	323	308	291	225	232	229	224	201	209	198	194	159	153	147	217	5305
433	175	150	135	282	271	204	201	264	306	246	268	281	347	297	415	375	344	382	287	355	347	530	6462
434	259	192	149	214	219	232	179	235	221	222	291	237	318	256	288	286	374	315	319	344	331	472	5953
435	593	457	392	654	800	767	662	702	735	806	1092	1069	1432	1403	1558	1960	2251	2168	2250	3080	4133	6117	35081
436	319	340	264	399	483	315	317	433	408	412	641	668	876	708	785	972	1045	949	949	1036	1143	1455	14917
438	404	403	342	399	423	455	502	536	630	642	772	690	889	810	1100	1184	1467	1616	1863	1801	2082	2915	21925
439	670	656	494	576	530	464	567	687	808	795	1124	1060	1236	1262	1269	1331	1293	1348	1346	1469	1616	1875	22476
440	95	69	48	55	76	96	98	76	116	118	160	173	192	221	220	187	182	182	181	194	160	210	3109
441	87	65	49	66	94	69	58	66	111	118	132	128	145	128	136	118	111	139	125	119	120	141	2325
442	176	224	161	197	248	211	198	268	260	232	259	266	330	309	251	314	335	359	384	355	428	473	6238
445	77	72	69	74	71	61	69	77	76	73	106	85	118	126	103	122	94	70	80	125	149	180	2077
446	237	271	234	337	340	201	175	215	246	308	340	275	391	370	375	375	345	385	338	351	292	445	6846
449	4	4	6	11	14	13	15	10	11	4	6	9	2	2	11	5	1	5	4	3	8	3	151
450	14	16	13	20	23	16	27	14	14	18	20	15	23	18	23	25	23	13	26	28	35	42	466
451	396	338	235	314	306	239	222	293	406	386	429	357	437	428	447	462	460	389	407	455	547	552	8505
452	104	77	55	93	93	88	73	91	123	137	129	112	105	125	116	161	124	120	95	105	72	103	2301
453	15	31	16	22	26	18	22	26	29	24	10	20	28	22	43	36	27	30	35	43	18	21	562
454	184	161	125	162	175	159	145	179	260	196	242	193	236	242	234	262	226	262	194	227	219	319	4602
455	440	392	272	411	392	390	382	380	427	438	542	454	549	570	616	724	886	998	1182	1637	1460	2308	15850
460	19	19	33	22	48	42	25	41	41	24	24	23	26	38	34	33	22	30	44	47	26	44	705
462	16	16	15	23	11	14	17	17	22	26	30	19	29	31	18	35	29	34	31	10	11	14	468
463	48	62	52	49	59	64	52	53	56	62	65	49	84	63	78	90	94	110	115	109	197	320	1931
464	157	178	110	164	173	142	122	182	213	175	218	188	237	208	189	212	213	201	153	172	234	262	4103
470	53	45	32	21	42	39	27	35	40	34	40	35	35	42	35	29	32	26	18	33	28	35	756
472	46	52	40	45	72	31	28	33	39	48	38	50	66	89	60	68	73	74	82	91	84	115	1324
473	309	326	269	278	288	245	171	218	265	231	288	294	478	492	549	561	547	693	717	686	681	918	9504
474	180	123	103	119	154	129	115	178	280	254	267	215	283	243	243	204	252	213	211	143	178	217	4304
475	131	130	85	132	164	102	106	159	148	159	224	223	243	215	227	258	200	207	203	226	231	244	4017
476	21	15	13	21	24	10	15	27	22	21	15	16	12	17	27	17	18	25	19	28	24	24	431
477	80	98	52	81	122	101	101	161	172	198	255	233	243	227	319	271	177	147	207	241	266	305	4057
482	102	129	88	173	170	175	143	171	201	274	300	302	365	364	399	371	403	440	395	436	468	552	6421
483	19	26	15	27	15	29	25	26	43	67	77	44	63	33	36	38	44	48	41	18	36	42	812
492	67	82	29	60	66	53	52	59	52	64	62	67	110	94	76	110	88	69	109	120	110	167	1766
493	227	189	108	172	217	144	142	159	273	266	260	215	257	233	307	303	274	201	205	232	200	297	4881
494	76	84	62	72	82	67	62	60	59	41	71	64	82	78	68	62	78	89	65	89	74	99	1584

## PATENTS GRANTED BY CLASS BY YEAR (ORs + XRs)

CLASS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
501	294	336	192	266	277	264	262	281	325	289	324	408	554	466	681	606	591	570	432	429	457	439	8743
502	723	788	608	697	752	679	765	801	750	626	609	598	759	703	834	848	777	670	615	601	600	798	15601
503	74	68	46	72	75	68	76	79	109	109	96	150	174	199	199	211	225	249	185	158	152	153	2927
504	391	379	223	281	300	291	306	325	344	344	347	343	371	372	295	318	284	242	243	284	319	290	6892
505	93	77	70	88	89	90	83	103	113	107	87	16	89	235	335	384	361	304	242	214	172	173	3525
507	93	111	72	117	101	104	100	191	198	147	163	138	123	110	140	136	103	97	67	82	111	102	2606
508	175	238	206	184	206	138	170	190	212	163	198	218	238	214	238	236	240	275	238	260	230	265	4732
510	306	388	275	295	334	234	287	319	312	281	334	355	450	359	401	385	402	421	526	563	530	787	8544
512	75	89	68	82	102	75	76	70	95	83	66	55	40	50	46	44	49	49	31	43	36	51	1375
514	2073	2091	1486	1953	1944	1805	1566	1894	1988	2049	2293	2355	3247	3028	3282	3250	3334	2846	3325	3892	4942	5394	60037
516	152	162	107	141	125	147	170	197	164	142	136	151	170	161	198	204	188	184	159	185	154	54	3451
518	54	62	49	63	48	52	53	57	77	88	53	45	39	30	30	27	23	12	20	18	15	33	948
520	0	0	2	0	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	6
521	418	476	302	419	456	370	349	417	385	359	359	350	352	320	367	464	439	373	327	316	363	437	8418
522	240	240	186	214	292	189	181	181	209	187	205	200	213	234	252	218	235	223	251	243	232	283	4908
523	409	480	309	345	409	431	479	548	540	440	493	486	523	456	594	542	588	582	560	533	525	659	10931
524	1404	1679	1065	1175	1446	1152	1281	1327	1387	1086	1169	1203	1327	1248	1516	1515	1603	1640	1384	1473	1448	1642	30170
525	1126	1343	845	1053	1320	1086	1141	1121	1293	1105	1198	1277	1564	1498	1639	1734	2002	1966	1533	1595	1437	1601	30477
526	685	743	489	564	660	513	574	561	677	546	663	553	604	657	754	835	961	833	716	695	731	816	14830
527	52	45	26	20	17	43	36	25	33	20	33	25	34	25	43	41	41	32	25	27	25	38	706
528	1097	1204	724	969	1056	881	919	978	1013	892	952	1096	1220	1238	1299	1388	1446	1365	1161	1169	1161	1273	24501
530	282	342	198	325	313	298	318	428	363	382	569	567	649	618	753	966	1116	914	986	1248	1857	2730	16222
532	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
534	291	235	126	178	222	153	135	167	200	156	165	144	199	189	208	181	191	190	159	197	182	242	4110
536	265	273	203	316	289	297	250	301	277	268	363	405	571	614	704	687	835	808	1051	1574	2194	3126	15671
540	589	534	448	459	512	452	378	416	418	370	443	431	497	520	519	475	499	442	482	581	614	541	10620
544	921	882	606	704	808	675	564	720	896	851	944	919	1063	1039	963	936	1004	874	907	914	1042	1119	19351
546	965	885	656	800	865	761	605	692	861	835	953	961	1122	1118	1079	1053	1192	1029	1078	1128	1321	1258	21217
548	979	1052	781	910	971	760	660	851	920	880	910	919	1132	1117	1088	1102	1162	990	1034	1172	1181	1100	21671
549	868	889	585	826	774	601	521	539	627	570	578	524	747	698	647	738	789	711	691	685	780	813	15201
552	206	166	129	193	186	133	118	149	148	121	96	82	110	120	105	133	124	99	136	133	123	134	2944
554	269	289	179	167	269	162	109	130	171	137	109	103	117	131	125	157	158	142	149	128	122	149	3472
556	312	292	227	285	283	229	228	204	250	297	321	274	306	333	402	412	415	349	336	383	359	361	6858
558	631	589	405	545	517	433	419	464	469	409	408	379	462	428	420	430	482	370	366	321	349	363	9659
560	975	947	616	736	930	679	513	625	649	627	648	576	692	635	640	672	760	588	552	497	571	622	14750
562	755	803	549	634	726	546	449	499	483	463	484	461	558	509	506	557	586	490	448	399	482	556	11943
564	768	671	479	538	637	528	410	424	512	464	455	428	546	534	616	583	596	520	535	490	582	639	11955
568	826	858	596	767	868	684	607	700	687	630	581	489	598	628	670	745	726	611	590	470	497	706	14534
570	143	115	68	77	84	94	86	67	50	73	74	117	153	128	126	153	156	135	145	127	117	167	2455
585	440	434	299	303	358	290	349	380	408	320	341	331	405	414	481	423	467	389	395	310	294	407	8238
588	44	40	43	48	47	73	64	105	72	86	109	68	60	46	34	47	125	174	218	228	195	203	2129
600	326	321	296	476	511	426	425	503	599	685	837	838	1169	1060	1180	1223	1335	1566	1583	1426	1275	2141	20201
601	85	84	80	97	79	67	67	73	88	128	145	148	183	192	210	212	171	162	213	184	173	229	3070
602	67	59	70	93	102	68	94	93	128	144	158	163	158	181	228	199	193	206	291	229	245	346	3515
604	476	400	323	532	518	516	509	599	692	843	1081	973	1301	1244	1297	1439	1566	1866	1747	1652	1736	2274	23584
606	188	179	139	210	218	188	192	322	371	436	517	503	565	645	772	918	1009	1326	1350	1401	1665	2137	15251
607	108	120	113	121	173	142	151	147	213	229	240	220	269	323	325	331	376	504	522	489	479	779	6374
623	141	125	120	153	171	142	121	154	193	249	359	307	388	404	411	514	380	462	399	564	578	816	7151
701	132	125	102	119	129	184	189	219	241	260	373	360	574	562	665	570	579	578	660	712	610	1008	8951
702	219	198	175	223	232	287	278	259	325	396	455	405	612	490	483	436	458	545	508	731	696	949	9360
704	42	43	25	38	55	59	85	92	78	114	128	122	210	195	184	194	241	250	233	313	470	781	3952

## PATENTS GRANTED BY CLASS BY YEAR (ORs + XRs)

CLASS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
705	35	29	23	37	35	53	46	55	60	68	86	92	164	119	128	125	205	217	150	207	284	570	2788	
706	1	0	1	5	1	1	0	6	5	17	30	42	109	154	194	288	388	296	343	343	337	476	3037	
707	23	33	17	19	18	28	25	60	66	56	69	75	133	130	130	197	291	362	512	667	791	1572	5274	
711	93	93	64	70	86	80	97	154	129	122	136	148	191	188	181	270	328	475	654	895	962	1360	6776	
800	3	3	1	1	5	2	5	3	7	16	19	23	22	13	29	48	38	99	91	253	281	446	1408	
901	50	41	45	62	77	78	113	92	182	219	329	246	313	252	236	214	204	157	154	147	132	185	3528	
902	26	26	18	27	40	68	59	66	42	128	156	45	35	27	33	25	32	28	37	31	49	57	1055	
930	75	141	55	123	102	114	141	163	170	180	309	317	255	6	12	58	76	66	38	59	85	79	2624	
968	364	372	206	344	338	230	257	282	183	133	211	176	178	127	6	0	1	0	1	1	0	6	3416	
976	451	416	259	348	413	312	281	362	314	422	710	517	509	258	172	48	9	21	23	23	19	25	5912	
984	196	228	223	294	266	267	198	230	201	188	282	187	230	182	0	0	0	0	0	0	0	0	0	3172
987	459	614	344	380	449	283	307	344	364	302	332	302	309	299	75	2	0	1	1	1	5	4	5177	
D01	7	10	19	18	8	16	36	8	10	21	22	31	25	38	67	82	52	48	41	62	52	55	728	
D02	100	106	67	136	147	125	134	137	214	166	221	299	258	282	338	384	484	461	354	394	538	739	6084	
D03	140	215	148	160	221	213	204	189	246	197	214	206	191	355	429	383	443	406	430	444	450	547	6431	
D04	25	30	20	19	36	41	35	66	53	63	80	64	59	82	100	94	131	117	161	156	143	168	1743	
D05	41	17	22	24	41	37	31	11	10	11	16	29	34	16	30	14	24	13	33	29	40	52	575	
D06	589	722	535	592	675	713	659	707	735	793	811	814	714	844	1085	1097	1475	1216	1535	1514	1283	1658	20766	
D07	342	393	307	424	440	465	396	409	441	571	516	464	527	578	583	570	799	736	693	874	673	856	12057	
D08	392	348	257	370	424	456	433	488	417	520	494	572	598	685	801	890	906	921	911	903	890	1173	13849	
D09	209	290	186	322	378	332	310	352	362	389	380	298	327	620	704	563	644	685	699	688	708	811	10257	
D10	264	258	222	277	278	272	259	290	281	281	323	291	351	475	681	575	579	650	783	540	617	790	9337	
D11	188	247	178	230	253	258	214	174	234	203	196	141	227	232	320	305	399	375	477	404	446	498	6199	
D12	324	248	215	235	290	290	330	342	311	445	652	629	634	746	768	759	916	819	781	783	876	1099	12492	
D13	100	99	71	98	120	127	132	162	155	178	151	167	201	315	425	404	373	387	381	373	321	489	5229	
D14	255	271	189	228	316	364	275	405	482	478	590	572	620	841	895	770	993	1083	1127	1115	1102	1363	14334	
D15	181	139	106	158	164	261	285	306	271	211	215	212	190	255	180	321	381	283	380	363	272	352	5486	
D16	133	80	60	68	76	90	85	119	74	110	111	108	96	178	192	211	191	225	232	281	259	404	3383	
D17	22	27	19	49	50	36	53	32	56	42	42	39	29	74	92	56	54	80	53	59	49	67	1080	
D18	100	117	88	91	158	158	134	143	235	225	223	242	226	296	360	238	300	256	296	287	238	236	4647	
D19	114	164	152	147	173	147	149	139	148	199	154	137	176	248	324	357	365	290	380	238	309	414	4924	
D20	40	43	28	46	38	44	56	65	72	64	73	77	41	106	133	107	137	169	156	128	182	219	2024	
D21	353	363	331	380	511	524	449	425	539	504	551	482	619	698	889	828	807	1055	1054	920	871	1102	14255	
D22	75	87	66	137	121	76	138	134	92	116	155	154	213	184	147	189	153	188	205	225	158	189	3202	
D23	225	192	204	255	298	348	287	321	248	347	385	349	281	414	648	559	491	594	612	579	605	831	9073	
D24	238	235	152	216	268	385	306	395	347	474	448	410	466	439	519	576	562	595	607	586	488	565	9277	
D25	296	203	214	216	246	214	156	236	113	185	169	143	229	191	203	266	286	334	374	312	343	363	5292	
D26	125	113	97	78	147	149	138	123	132	177	216	178	232	233	353	347	308	398	419	505	488	581	5537	
D27	68	63	19	37	40	32	34	28	16	25	32	29	27	30	35	12	25	37	37	39	47	90	802	
D28	77	72	74	96	122	78	127	105	143	160	114	135	196	281	196	142	173	280	201	216	214	231	3433	
D29	28	24	20	41	18	37	38	37	61	47	45	72	58	77	62	61	80	96	113	95	89	80	1279	
D30	89	60	42	76	65	62	65	48	68	62	109	103	81	91	163	167	220	206	207	206	156	127	2473	
D32	52	64	36	67	80	76	79	85	97	109	176	138	135	193	217	153	168	224	238	222	239	258	3106	
D34	79	68	61	46	68	96	69	87	73	150	208	276	252	230	331	389	389	289	299	219	164	250	4093	
D99	26	27	26	24	24	43	26	31	39	42	54	26	43	35	34	55	68	53	84	57	71	86	974	
PLT	173	186	132	117	183	173	197	212	242	224	229	425	587	318	353	321	442	499	389	367	394	561	6724	
TOTAL	130551	96827		131987		113749		141837		164288		185807		184319		189092		191409		205180		3554732		
		132471		122590		116791		131999		141104		153757		174322		185733		192114		204229		264576		

U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
001	** Classification Undetermined **
002	Apparel
004	Baths, Closets, Sinks, and Spittoons
005	Beds
007	Compound Tools
008	Bleaching and Dyeing; Fluid Treatment and Chemical Modification of Textiles and Fibers
012	Boot and Shoe Making
014	Bridges
015	Brushing, Scrubbing, and General Cleaning
016	Miscellaneous Hardware
019	Textiles: Fiber Preparation
023	Chemistry: Physical Processes
024	Buckles, Buttons, Clasps, Etc.
026	Textiles: Cloth Finishing
027	Undertaking
028	Textiles: Manufacturing
029	Metal Working
030	Cutlery
033	Geometrical Instruments
034	Drying and Gas or Vapor Contact with Solids
036	Boots, Shoes, and Leggings
037	Excavating
038	Textiles: Ironing or Smoothing
040	Card, Picture, or Sign Exhibiting
042	Firearms
043	Fishing, Trapping, and Vermin Destroying
044	Fuel and Related Compositions
047	Plant Husbandry
048	Gas: Heating and Illuminating
049	Movable or Removable Closures
051	Abrasive Tool Making Process, Material, or Composition
052	Static Structures (e.g., Buildings)
053	Package Making
054	Harness
055	Gas Separation
056	Harvesters
057	Textiles: Spinning, Twisting, and Twining
059	Chain, Staple, and Horseshoe Making
060	Power Plants
062	Refrigeration
063	Jewelry
065	Glass Manufacturing
066	Textiles: Knitting
068	Textiles: Fluid Treating Apparatus
069	Leather Manufactures
070	Locks
071	Chemistry: Fertilizers
072	Metal Deforming
073	Measuring and Testing
074	Machine Element or Mechanism
075	Specialized Metallurgical Processes, Compositions for Use Therein, Consolidated Metal Powder Compositions, and Loose Metal Particulate Mixtures
076	Metal Tools and Implements, Making
079	Button Making
081	Tools
082	Turning
083	Cutting
084	Music
086	Ammunition and Explosive-Charge Making
087	Textiles: Braiding, Netting, and Lace Making

U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
089	Ordnance
091	Motors: Expansible Chamber Type
092	Expansible Chamber Devices
095	Gas Separation: Processes
096	Gas Separation: Apparatus
099	Foods and Beverages: Apparatus
100	Presses
101	Printing
102	Ammunition and Explosives
104	Railways
105	Railway Rolling Stock
106	Compositions: Coating or Plastic
108	Horizontally Supported Planar Surfaces
109	Safes, Bank Protection, or a Related Device
110	Furnaces
111	Planting
112	Sewing
114	Ships
116	Signals and Indicators
117	Single-Crystal, Oriented-Crystal, and Epitaxy Growth Processes; Non-Coating Apparatus Therefor
118	Coating Apparatus
119	Animal Husbandry
122	Liquid Heaters and Vaporizers
123	Internal-Combustion Engines
124	Mechanical Guns and Projectors
125	Stone Working
126	Stoves and Furnaces
127	Sugar, Starch, and Carbohydrates
128	Surgery
131	Tobacco
132	Toilet
134	Cleaning and Liquid Contact with Solids
135	Tent, Canopy, Umbrella, or Cane
136	Batteries: Thermoelectric and Photoelectric
137	Fluid Handling
138	Pipes and Tubular Conduits
139	Textiles: Weaving
140	Wireworking
141	Fluent Material Handling, with Receiver or Receiver Coacting Means
142	Wood Turning
144	Woodworking
147	Coopering
148	Metal Treatment
149	Explosive and Thermic Compositions or Charges
150	Purses, Wallets, and Protective Covers
152	Resilient Tires and Wheels
156	Adhesive Bonding and Miscellaneous Chemical Manufacture
157	Wheelwright Machines
159	Concentrating Evaporators
160	Flexible or Portable Closure, Partition, or Panel
162	Paper Making and Fiber Liberation
163	Needle and Pin Making
164	Metal Founding
165	Heat Exchange
166	Wells
168	Farriery
169	Fire Extinguishers



U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER OR DER

UTILITY CLASSES

CLASS	TITLE
171	Unearthing Plants or Buried Objects
172	Earth Working
173	Tool Driving or Impacting
174	Electricity: Conductors and Insulators
175	Boring or Penetrating the Earth
177	Weighing Scales
178	Telegraphy
180	Motor Vehicles
181	Acoustics
182	Fire Escape, Ladder, or Scaffold
184	Lubrication
185	Motors: Spring, Weight, or Animal Powered
186	Merchandising
187	Elevator, Industrial Lift Truck, or Stationary Lift for Vehicle
188	Brakes
190	Trunks and Hand-Carried Luggage
191	Electricity: Transmission To Vehicles
192	Clutches and Power-Stop Control
193	Conveyors, Chutes, Skids, Guides, and Ways
194	Check-Actuated Control Mechanisms
196	Mineral Oils: Apparatus
198	Conveyors: Power-Driven
199	Type Casting
200	Electricity: Circuit Makers and Breakers
201	Distillation: Processes, Thermolytic
202	Distillation: Apparatus
203	Distillation: Processes, Separatory
204	Chemistry: Electrical and Wave Energy
205	Electrolysis: Processes, Compositions Used Therein, and Methods of Preparing the Compositions
206	Special Receptacle or Package
208	Mineral Oils: Processes and Products
209	Classifying, Separating, and Assorting Solids
210	Liquid Purification or Separation
211	Supports: Racks
212	Traversing Hoists
213	Railway Draft Appliances
215	Bottles and Jars
216	Etching a Substrate: Processes
217	Wooden Receptacles
218	High-Voltage Switches with Arc Preventing or Extinguishing Devices
219	Electric Heating
220	Receptacles
221	Article Dispensing
222	Dispensing
223	Apparel Apparatus
224	Package and Article Carriers
225	Severing by Tearing or Breaking
226	Advancing Material of Indeterminate Length
227	Elongated-Member-Driving Apparatus
228	Metal Fusion Bonding
229	Envelopes, Wrappers, and Paperboard Boxes
231	Whips and Whip Apparatus
232	Deposit and Collection Receptacles
234	Selective Cutting (e.g., Punching)
235	Registers
236	Automatic Temperature and Humidity Regulation

U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
237	Heating Systems
238	Railways: Surface Track
239	Fluid Sprinkling, Spraying, and Diffusing
241	Solid Material Comminution or Disintegration
242	Winding, Tensioning, or Guiding
244	Aeronautics
245	Wire Fabrics and Structure
246	Railway Switches and Signals
248	Supports
249	Static Molds
250	Radiant Energy
251	Valves and Valve Actuation
252	Compositions
254	Implements or Apparatus for Applying Pushing or Pulling Force
256	Fences
257	Active Solid-State Devices (e.g., Transistors, Solid-State Diodes)
258	Railway Mail Delivery
260	Chemistry of Carbon Compounds
261	Gas and Liquid Contact Apparatus
264	Plastic and Nonmetallic Article Shaping or Treating: Processes
266	Metallurgical Apparatus
267	Spring Devices
269	Work Holders
270	Sheet-Material Associating
271	Sheet Feeding or Delivering
273	Amusement Devices: Games
276	Typesetting
277	Seal for a Joint or Junction
278	Land Vehicles: Animal Draft Appliances
279	Chucks or Sockets
280	Land Vehicles
281	Books, Strips, and Leaves
283	Printed Matter
285	Pipe Joints or Couplings
289	Knots and Knot Tying
290	Prime-Mover Dynamo Plants
291	Track Sanders
292	Closure Fasteners
293	Vehicle Fenders
294	Handling: Hand and Hoist-Line Implements
295	Railway Wheels and Axles
296	Land Vehicles: Bodies and Tops
297	Chairs and Seats
298	Land Vehicles: Dumping
299	Mining or In Situ Disintegration of Hard Material
300	Brush, Broom, and Mop Making
301	Land Vehicles: Wheels and Axles
303	Fluid-Pressure and Analogous Brake Systems
305	Wheel Substitutes for Land Vehicles
307	Electrical Transmission or Interconnection Systems
310	Electrical Generator or Motor Structure
312	Supports: Cabinet Structure
313	Electric Lamp and Discharge Devices
314	Electric Lamp and Discharge Devices: Consumable Electrodes
315	Electric Lamp and Discharge Devices: Systems

U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
318	Electricity: Motive Power Systems
320	Electricity: Battery or Capacitor Charging or Discharging
322	Electricity: Single Generator Systems
323	Electricity: Power Supply or Regulation Systems
324	Electricity: Measuring and Testing
326	Electronic Digital Logic Circuitry
327	Miscellaneous Active Electrical Nonlinear Devices, Circuits, and Systems
329	Demodulators
330	Amplifiers
331	Oscillators
332	Modulators
333	Wave Transmission Lines and Networks
334	Tuners
335	Electricity: Magnetically Operated Switches, Magnets, and Electromagnets
336	Inductor Devices
337	Electricity: Electrothermally or Thermally Actuated Switches
338	Electrical Resistors
340	Communications: Electrical
341	Coded Data Generation or Conversion
342	Communications: Directive Radio Wave Systems and Devices (e.g., Radar, Radio Navigation)
343	Communications: Radio Wave Antennas
345	Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems
346	Recorders
347	Incremental Printing of Symbolic Information
348	Television
349	Liquid Crystal Cells, Elements and Systems
351	Optics: Eye Examining, Vision Testing and Correcting
352	Optics: Motion Pictures
353	Optics: Image Projectors
355	Photocopying
356	Optics: Measuring and Testing
358	Facsimile
359	Optics: Systems (Including Communication) and Elements
360	Dynamic Magnetic Information Storage or Retrieval
361	Electricity: Electrical Systems and Devices
362	Illumination
363	Electric Power Conversion Systems
364	Electrical Computers and Data Processing Systems
365	Static Information Storage and Retrieval
366	Agitating
367	Communications, Electrical: Acoustic Wave Systems and Devices
368	Horology: Time Measuring Systems or Devices
369	Dynamic Information Storage or Retrieval
370	Multiplex Communications
371	Error Detection/Correction and Fault Detection/Recovery
372	Coherent Light Generators
373	Industrial Electric Heating Furnaces
374	Thermal Measuring and Testing
375	Pulse or Digital Communications
376	Induced Nuclear Reactions: Processes, Systems, and Elements

U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
377	Electrical Pulse Counters, Pulse Dividers, or Shift Registers: Circuits and Systems
378	X-Ray or Gamma Ray Systems or Devices
379	Telephonic Communications
380	Cryptography
381	Electrical Audio Signal Processing Systems and Devices
382	Image Analysis
383	Flexible Bags
384	Bearings
385	Optical Waveguides
386	Television Signal Processing for Dynamic Recording or Reproducing
388	Electricity: Motor Control Systems
392	Electric Resistance Heating Devices
395	Information Processing System Organization
396	Photography
399	Electrophotography
400	Typewriting Machines
401	Coating Implements with Material Supply
402	Binder Device Releasably Engaging Aperture or Notch of Sheet
403	Joints and Connections
404	Road Structure, Process, or Apparatus
405	Hydraulic and Earth Engineering
406	Conveyors: Fluid Current
407	Cutters, for Shaping
408	Cutting by Use of Rotating Axially Moving Tool
409	Gear Cutting, Milling, or Planing
410	Freight Accommodation On Freight Carrier
411	Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener
412	Bookbinding: Process and Apparatus
413	Sheet Metal Container Making
414	Material or Article Handling
415	Rotary Kinetic Fluid Motors or Pumps
416	Fluid Reaction Surfaces (i.e., Impellers)
417	Pumps
418	Rotary Expansible Chamber Devices
419	Powder Metallurgy Processes
420	Alloys or Metallic Compositions
422	Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing
423	Chemistry of Inorganic Compounds
424	Drug, Bio-Affecting and Body Treating Compositions
425	Plastic Article or Earthenware Shaping or Treating: Apparatus
426	Food or Edible Material: Processes, Compositions, and Products
427	Coating Processes
428	Stock Material or Miscellaneous Articles
429	Chemistry: Electrical Current Producing Apparatus, Product, and Process
430	Radiation Imagery Chemistry: Process, Composition, or Product Thereof
431	Combustion
432	Heating
433	Dentistry
434	Education and Demonstration
435	Chemistry: Molecular Biology and Microbiology

U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
436	Chemistry: Analytical and Immunological Testing
438	Semiconductor Device Manufacturing: Process
439	Electrical Connectors
440	Marine Propulsion
441	Buoys, Rafts, and Aquatic Devices
442	Fabric (Woven, Knitted, or Nonwoven Textile or Cloth, Etc.)
445	Electric Lamp or Space Discharge Component or Device Manufacturing
446	Amusement Devices: Toys
449	Bee Culture
450	Foundation Garments
451	Abrading
452	Butchering
453	Coin Handling
454	Ventilation
455	Telecommunications
460	Crop Threshing or Separating
462	Books, Strips, and Leaves for Manifolding
463	Amusement Devices: Games
464	Rotary Shafts, Gudgeons, Housings, and Flexible Couplings for Rotary Shafts
470	Threaded, Headed Fastener, or Washer Making: Process and Apparatus
472	Amusement Devices
473	Games Using Tangible Projectile
474	Endless Belt Power Transmission Systems or Components
475	Planetary Gear Transmission Systems or Components
476	Friction Gear Transmission Systems or Components
477	Interrelated Power Delivery Controls, Including Engine Control
482	Exercise Devices
483	Tool Changing
492	Roll or Roller
493	Manufacturing Container or Tube From Paper; or Other Manufacturing From a Sheet or Web
494	Imperforate Bowl: Centrifugal Separators
501	Compositions: Ceramic
502	Catalyst, Solid Sorbent, or Support Therefor: Product or Process of Making
503	Record Receiver Having Plural Interactive Leaves or a Colorless Color Former, Method of Use, or Developer Therefor
504	Plant Protecting and Regulating Compositions
505	Superconductor Technology: Apparatus, Material, Process
507	Earth Boring, Well Treating, and Oil Field Chemistry
508	Solid Anti-Friction Devices, Materials Therefor, Lubricant or Separate Compositions for Moving Solid Surfaces, and Miscellaneous Mineral Oil Compositions
510	Cleaning Compositions for Solid Surfaces, Auxiliary Compositions Therefor, or Processes of Preparing the Compositions
512	Perfume Compositions
514	Drug, Bio-Affecting and Body Treating Compositions
516	Colloid Systems and Wetting Agents; Subcombinations Thereof; Processes Of
518	Chemistry: Fischer-Tropsch Processes; or Purification or Recovery of Products Thereof
520	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series

U.S. PATENT CLASSES AS OF 31-DEC-1998  
 TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
521	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
522	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
523	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
524	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
525	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
526	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
527	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
528	Synthetic Resins or Natural Rubbers -- Part of the Class 520 Series
530	Chemistry: Natural Resins or Derivatives; Peptides or Proteins; Lignins or Reaction Products Thereof
532	Organic Compounds -- Part of the Class 532-570 Series
534	Organic Compounds -- Part of the Class 532-570 Series
536	Organic Compounds -- Part of the Class 532-570 Series
540	Organic Compounds -- Part of the Class 532-570 Series
544	Organic Compounds -- Part of the Class 532-570 Series
546	Organic Compounds -- Part of the Class 532-570 Series
548	Organic Compounds -- Part of the Class 532-570 Series
549	Organic Compounds -- Part of the Class 532-570 Series
552	Organic Compounds -- Part of the Class 532-570 Series
554	Organic Compounds -- Part of the Class 532-570 Series
556	Organic Compounds -- Part of the Class 532-570 Series
558	Organic Compounds -- Part of the Class 532-570 Series
560	Organic Compounds -- Part of the Class 532-570 Series
562	Organic Compounds -- Part of the Class 532-570 Series
564	Organic Compounds -- Part of the Class 532-570 Series
568	Organic Compounds -- Part of the Class 532-570 Series
570	Organic Compounds -- Part of the Class 532-570 Series
585	Chemistry of Hydrocarbon Compounds
588	Hazardous or Toxic Waste Destruction or Containment
600	Surgery
601	Surgery: Kinesitherapy
602	Surgery: Splint, Brace, or Bandage
604	Surgery
606	Surgery
607	Surgery: Light, Thermal, and Electrical Application
623	Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor
701	Data Processing: Vehicles, Navigation, and Relative Location
702	Data Processing: Measuring, Calibrating, or Testing
704	Data Processing: Speech Signal Processing, Linguistics, Language Translation, and Audio Compression/Decompression
705	Data Processing: Financial, Business Practice, Management, or Cost/Price Determination
706	Data Processing: Artificial Intelligence
707	Data Processing: Database and File Management, Data Structures, or Document Processing
711	Electrical Computers and Digital Processing Systems: Memory
800	Multicellular Living Organisms and Unmodified Parts Thereof and Related Processes

U.S. PATENT CLASSES AS OF 31- DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

UTILITY CLASSES

CLASS	TITLE
901	Robots
902	Electronic Funds Transfer
930	Peptide or Protein Sequence
968	Horology
976	Nuclear Technology
984	Musical Instruments
987	Organic Compounds Containing a Bi, Sb, As, or P Atom or Containing a Metal Atom of the 6th To 8th Group of the Periodic System

U.S. PATENT CLASSES AS OF 31-DEC-1998  
TITLES ARRANGED IN CLASS NUMBER ORDER

DESIGN AND PLANT CLASSES

CLASS	TITLE
D00	** Design Classification Undetermined **
D01	Edible Products
D02	Apparel and Haberdashery
D03	Travel Goods and Personal Belongings
D04	Brushware
D05	Textile or Paper Yard Goods; Sheet Material
D06	Furnishings
D07	Equipment for Preparing or Serving Food or Drink Not Elsewhere Specified
D08	Tools and Hardware
D09	Packages and Containers for Goods
D10	Measuring, Testing, or Signalling Instruments (1) (2)
D11	Jewelry, Symbolic Insignia, and Ornaments
D12	Transportation
D13	Equipment for Production, Distribution, or Transformation of Energy
D14	Recording, Communication, or Information Retrieval Equipment
D15	Machines Not Elsewhere Specified
D16	Photography and Optical Equipment
D17	Musical Instruments
D18	Printing and Office Machinery
D19	Office Supplies; Artists' and Teachers' Materials
D20	Sales and Advertising Equipment
D21	Games, Toys, and Sports Goods
D22	Arms, Pyrotechnics, Hunting and Fishing Equipment
D23	Environmental Heating and Cooling; Fluid Handling and Sanitary Equipment
D24	Medical and Laboratory Equipment
D25	Building Units and Construction Elements
D26	Lighting
D27	Tobacco and Smokers' Supplies
D28	Cosmetic Products and Toilet Articles
D29	Equipment for Safety, Protection, and Rescue (1)
D30	Animal Husbandry
D32	Washing, Cleaning, or Drying Machine
D34	Material or Article Handling Equipment
D99	Miscellaneous
PLT	Plants