

# Some Data About Patents in Class 705

## (Alone and Compared to Other Classes)

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Class 705 is often identified with “business method patents” (BMPs).<sup>1</sup> The Patent and Trademark Office (“PTO”) in its Manual of Classification defines this class as “Data Processing: Financial, Business Practice, Management, or Cost/Price Determination,” a definition which is both underinclusive and overinclusive for what people think are BMPs.<sup>2</sup> Still, the PTO’s white paper on BMPs identifies them with class 705,<sup>3</sup> and many well-known BMPs are in 705, including the patent in suit in *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 47 U.S.P.Q.2d 1596 (Fed. Cir. 1998), *cert. denied*, 119 S. Ct. 851 (1999), the case that changed the lore on BMPs, if not the law.<sup>4</sup> (That patent, 5,193,056, “Data Processing System for Hub and Spoke Financial Services Configuration,” filed 3/11/91 and issued 3/9/93, belongs to declaratory judgment defendant Signature.) Examples of famous BMPs that do not show up in a search of class 705 include:

- the patent in suit in *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 50 U.S.P.Q.2D 1447 (Fed. Cir. 1999), *cert. denied*, 120 S. Ct. 368 (1999) (5,333,184, entitled “Call Message Recording for Telephone Systems,” filed 5/6/92 and issued 7/26/94); and
- the “prepaid cellular” patent recently posted on Bountyquest<sup>5</sup> (6,157,823, “Security cellular telecommunications system,” original application filed 12/23/94, patent issued 12/5/00).

An example of a BMP patent that is double-classified is amazon.com’s patent on its 1-Click feature (5,960,411, “Method and System for Placing a Purchase Order via a

Communications Network,” filed 9/12/97, issued 9/28/99), the patent in suit in *amazon.com, inc. v. barnesandnoble.com, inc.*, 239 F.3d 1343, 57 U.S.P.Q.2d 1747 (Fed. Cir. 2001)). It is classified in both 705 and 345.

An example of a 705 patent that, though sued on, does not coincide with notions of BMP-ness may be 4,167,040, “Taximeter indicating devices,” issued 9/4/79, which claims a taximeter with a microprocessor.

Despite the lack of a 1:1 correspondence between class 705 and BMPs, the class is a good enough indicator of business method subject matter for rough “big picture” data analysis. I have done some, using the patent information on the LEXIS database.<sup>6</sup>

Initially I wanted to test the notion that the July 1998 Federal Circuit decision in *State Street* had made a substantial difference in the patent system.<sup>7</sup> I decided to look at the years 1990-2000 and to examine a few quantifiable characteristics of issued patents for which the “class” field included 705 (the “705 patents”). Then I chose a few other classes to compare with 705 in order to distinguish system-wide effects from BMP-specific ones, if possible.

I expected to find evidence of a change starting about **three years before** *State Street*, at least as to the PTO’s side of things. It was in September 1995 that the PTO published a revision of its Manual of Patent Examining Procedure (MPEP) — note the double negative here — *omitting* the paragraph that suggested that “methods of doing business” were *not* patentable subject matter.<sup>8</sup>

All the publicity about *State Street* no doubt caused an upsurge in applications. Application volume, however, is something the PTO keeps track of, not something that can be discerned clearly from the *issued* patents. Still, I had no doubt that as a result of *State Street* — or the MPEP change or the earlier judicial decisions that had led to the MPEP change, or all of the above (the “*State Street*/MPEP” effect) — more applications claiming “business methods” ultimately issued than would otherwise have been the case. This would be because exam-

iners issued fewer § 101 rejections and because more applicants were successful in overcoming those rejections. The issued patent data *could* show this, I suspected, in the length of prosecution of 705 patents and the percentage of them that issued on the first application (see Table B-2.)

Complicating any data analysis of 705 patents is the fact that the mid to late 1990s, which coincided with the *State Street*/MPEP effect, also saw the explosive growth of the internet. The web made possible new ways to do business and new things to do, period. How, then, to separate *State Street*/MPEP effects from web effects? The comparison of class 705 with other classes, both computer-related and not (see Table A and Graph 1), may not do it, but the results are thought provoking.

## THE SURVEYS

A. I compared class 705 to three other classes, chosen somewhat at random, but with a desire to compare BMPs to:

- another computer-related class,
- another high-tech field (molecular biology), and
- an “old-tech” field.

B. I looked at a few characteristics of all the patents issued in the month of May in class 705 for the years 1990-2000 inclusive.<sup>9</sup>

C. I calculated comparative litigation rates:

1. for 705 patents v. patents in the three classes previously selected, and
2. for patents that somewhere included the word “software” v. those that did not, in the entire LEXIS universe of patents issued between 1991 and 2000 without regard to “class.”

## CHARTS AND GRAPHS

### A. 705 Issuances v. Some Other Classes

#### 1. The Other Classes

I compared class 705 with classes 345, 435 and 318:

**345:** The patent that issued on the application of *In re Alappat*, 33 F.3d 1526, 31 U.S.P.Q.2D 1545 (Fed. Cir. 1994) (5,440,676, “Raster scan waveform display rasterizer with pixel intensity gradation,” filed on 1/29/88, issued 8/8/95) is in class 345. So is the *amazon.com* patent. Class 345 is defined as “Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems.” Obviously PTO examination of class 345 was affected by *Alappat*, and probably by

the § 101 discussions in *State Street* (1998) and *AT&T v. Excel* (1999) as well.

**435:** Biotechnology presents another area where the PTO's ability to separate wheat from chaff has (as with all new fields) been questioned within recent memory.<sup>10</sup> For biotech, I chose class 435, entitled "Chemistry: Molecular Biology And Microbiology," the class of the patents in suit in *Genentech, Inc. v. Novo Nordisk A/S* (see, e.g., 108 F.3d 1361, 42 U.S.P.Q.2d 1001 (Fed. Cir. 1997)): 5,424,199 issued on 6/13/95 and 4,601,980 issued 7/22/86, both based on an application filed 7/5/79.

**318:** The "old tech" class I chose was that of the Kearns' windshield wiper patents, among them 3,351,836, issued 11/7/67 on an application filed 12/1/64. See, e.g., *Kearns v. Chrysler Corp.*, 32 F.3d 1541, 31 U.S.P.Q.2d 1746 (Fed. Cir. 1994). Class 318 is defined as "Electricity: Motive Power Systems."

## 2. Issuances in Class 705 compared to other classes (numbers and percents)

After I had collected the 1990-2000 data for class 705 (see below, part B) and the issuance/litigation rate data for four classes (705, 345, 435 and 318) (see below, part C-1), it occurred to me to try "normalizing" the 705 data to the other classes. My goal was to distinguish between system-wide factors and class-specific factors. Full-year data for the years 1990 to 2000 were collected from the LEXIS database on 3/27/01.

In TABLE A, columns 2, 3, 5 and 7 list the number of patents issued annually for classes 705, 345, 318 and 435 respectively. The shaded columns (4, 6 and 8) give the 705 total as a percentage of the totals in classes 345, 318 and 435, respectively.<sup>11</sup>

Since the absolute numbers of patents in the three classes are quite different, the three sets of percentage data have different ranges. I multiplied the 345 data by 3 and the 435 data by 6 in order to present everything on GRAPH 1. This makes the time evolution of issuances in 705 relative to other classes more visible. For specific numbers, consult Table A.

## Observations - Table A

**Column 2:** The year 1995 was anomalously low for 705. 1995 was the year when there was a rush to file every application and continuation before June 8, 1995 (to get the benefit of the pre-GATT term calculation), but the rush should have affected all classes equally. This suggests that something else was going on with class 705 that year. Perhaps the change to the MPEP was the subject of internal debate, and that slowed things down.

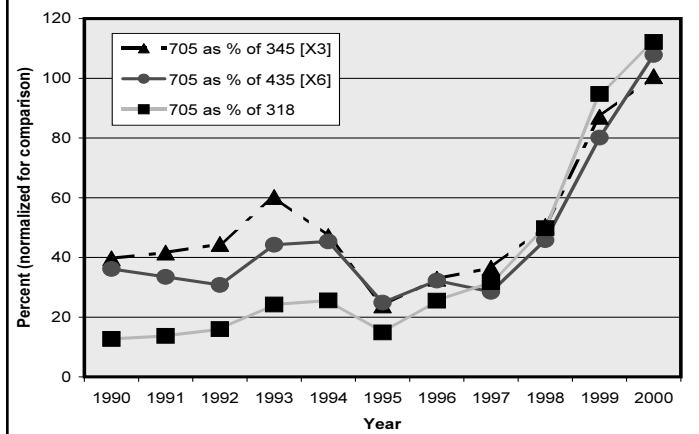
**TABLE A**

Patents Issued in Four Classes (1990-2000)

1	2	3	4	5	6	7	8
Year	Cl. 705	Cl. 345	705 as % of 345	Cl. 318	705 as % of 318	Cl. 435	705 as % of 435
1990	85	642	13	670	13	1411	6
1991	88	634	14	642	14	1577	6
1992	101	681	15	632	16	1970	5
1993	167	832	20	690	24	2265	7
1994	165	1050	16	645	26	2183	8
1995	94	1178	8	632	15	2270	4
1996	167	1524	11	655	25	3108	5
1997	198	1627	12	624	32	4172	5
1998	469	2790	17	944	50	6160	8
1999	833	2869	29	879	95	6238	13
2000	1006	2997	34	897	112	5599	18

**GRAPH 1**

Patents Issued in Class 705 as % of Patents Issued in Selected Other Classes



**Columns 2 and 3:** Both class 705 and class 345 saw a jump in absolute numbers of issuances in 1993 and 1994. This is too early for an *Alappat* effect or even for "web effects" considering that search engines and browsers barely existed then: Yahoo! came into existence in 1994 (<http://docs.yahoo.com/info/misc/history.html>), and the Netscape browser was first

offered that year (<http://home.netscape.com/newsref/pr/newsrelease1.html>). Perhaps these increases were attributable to *Arrhythmia Research Tech. v. Corazonix Corp.*, 958 F.2d 1053, 22 U.S.P.Q.2D 1033 (Fed. Cir. 1992) (a decision whose view of § 101 struck me as "If you have prior art, show me it; if not, stop whining;" see 589 PLI/Pat [n.4] at 88).

**Column 5:** Issuances in Class 318 were pretty steady until a big jump in 1998. This suggests that the increase in 1998 issuances — in any class — may have been due more to PTO initiatives to reduce processing time than to *State Street*, the growth of the web, or any other outside factors.

**Columns 7 and 8:** Class 435 issuances (absolute numbers) grew pretty steadily over this 11 year period, with a lull in 1993-1995 and a jump in 1998. What is interesting is the relative percent of class 705 issuances compared to class 435: it hovered around the middle single digits from 1990 to 1998, then took a big jump in 1999, and a further jump in 2000.

## Observations - Graph 1

Graph 1, which shows how class 705 issuances as a percentage of other classes have changed with time, provides some support for the *State Street*/web effect theory. The relationship of class 705 to other classes has been fairly uniform. The points from all 3 classes are pretty well in lock-step: a local maximum in 1993 and 1994 relative to 1992 and 1995, and a steady increase from 1995 to 2000. Perhaps most surprising is that class 345, which should have felt some effect from the "algorithm" part of the *State Street* decision as well as from the explosive growth of the web, looks so much like the other two classes, bio-tech and "old" tech, especially after 1994.

Graph 1 suggests that the *State Street* effect could be real. It looks like a horizontal line could legitimately be drawn through the scatter of points for all three classes for the years 1990 to 1998. The points for 1999 and 2000, however, do not lie on that line. This suggests that something affected 705 but not the other classes. Perhaps it

really was the PTO responding to *State Street*?

## B. Survey of Class 705, 1990-2000

### METHODOLOGY

Last June, I surveyed patents issued in class 705 in the month of May between the years 1990 and 2000 (see n.9). The total sample size was 277 patents.

TABLE B-1 suggests that using one month (here, May) does not systematically undercount or overcount patents in a particular class. Comparing the number of patents issued in May with 1/12 of the number issued in the year reveals that the May number is neither systematically low nor systematically high relative to an “average” month.

In Tables B-2, B-3 and B-4:

- the early years have been grouped together in order to have enough patents for a reasonable sample,
- “average” and “median” are used in their normal way. The average is computed by summing up the quantity of interest for all the patents in the sample, and dividing by the sample size; the median is the num-

ber for the middle patent when the patents in the sample are in a rank-ordered list, and

- Lowest and highest (or “low” and “high”) mean the lowest and highest numbers for the quantity of interest in that sample, and 25%ile and 75%ile are the quantity of interest of the patents one quarter from the bottom and one quarter from the top, respectively, in a rank-ordered list.

### CLASS 705 (May Issuance) TABLES

#### TABLE B-2

##### Length of Prosecution (in months)

The data in TABLE B-2 were collected on the theory that, before *State Street* (and certainly before *Arrhythmia*, and very likely before *Alappat*), most applicants in class 705 would have had to overcome subject matter (§ 101) rejections before their claims were examined for validity over the prior art. Those rejections would have delayed the processing time, with more applications spawning continuations. The comparative data remains to be collected, but meanwhile, the 705-only numbers are interesting.

GRAPH 2 shows the percentages listed in the last column of Table B-2: the percent-

age of patents (for the years 1990-2000 for patents issued in the month of May) that issued on the first U.S. application. The data for 1990-92 and 1993-95, respectively, have been aggregated. The graph visually reinforces the conclusion that 705 patents issued in 1996, 1997 and 1998 were more likely to be granted on a second or later application than patents issued before or after those years. These years roughly coincide with the period between *Alappat* and *State Street*.

#### TABLE B-3

##### Number of References Cited

TABLE B-3 shows the number of references cited in patents issued in class 705 in the month of May, from 1990 to 2000.

Column 1 gives the year or years. In columns 2-5, the number of references are stated as follows: **Median** [lowest, highest] {25%ile, 75%ile}. The columns show the total number of references cited, the number of US patents cited, the number of Foreign Patents cited, and the number of “other references,” all as listed on the face of the patents.

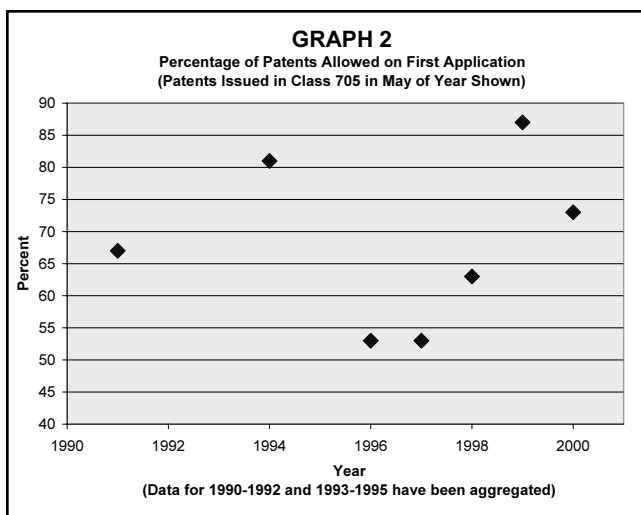
Examination by the PTO of any new technology is affected by the fact that there is little prior art, and especially little *patent* prior art. The general supposition is that examiners are more comfortable with patent prior art and that, until there is a sizable body of patent prior art, the quality of examination may suffer.

If there was in fact a dearth of patent prior art before *State Street*, then the number of US patents among the “references cited” on 705 patents should have been quite low before 1998 and should have been growing rapidly ever since. It appears that this is (mildly) the case. The year 1998 itself looks slightly out of line. Since these patents were issued in May, however, the July 1998 *State Street* decision cannot be the cause.

The list of “References Cited” on the face of a patent reflects the prior art relied

Year	May	Total	Tot +12
1990	12	85	7
1991	3	88	7
1992	9	101	8
1993	8	167	14
1994	12	165	14
1995	6	94	8
1996	17	167	14
1997	15	198	17
1998	35	469	39
1999	37	833	69
2000	123	1006	84

Year (# in sample)	Av.	Low	25%ile	Med.	75%ile	High	Allowed on 1st Appl. (%)
1990-2 (24)	35	16	25	28	37	113	16/24 67%
1993-5 (26)	38	15	25	30	43	119	21/26 81%
1996 (17)	43	18	30	37	58	83	9/17 53%
1997 (15)	47	22	32	44	58	115	8/15 53%
1998 (35)	44	20	31	37	48	113	22/35 63%
1999 (37)	34	16	26	30	39	99	32/37 87%
2000 (123)	37	11	26	32	43	153	90/123 73%



Yr(s)	Total	US Patents	Foreign Patents	Other References
1990-92	9 [3, 31] {6, 17}	7 [1, 25] {4, 12}	1 [0, 6] {0, 2}	0 [0, 12] {0, 3}
1993-95	10 [2, 58] {6, 20}	6 [2, 42] {4, 12}	0 [0, 22] {0, 1}	2 [0, 25] {0, 6}
1996	11 [4, 42] {6, 19}	9 [3, 39] {4, 13}	0 [0, 6] {0, 3}	1 [0, 10] {0, 3}
1997	12 [3, 64] {5, 20}	10 [2, 64] {4, 17}	0 [0, 9] {0, 3}	0 [0, 7] {0, 4}
1998	14 [1, 30] {6, 21}	7 [0, 29] {3, 16}	0 [0, 4] {0, 0}	1 [0, 15] {0, 6}
1999	15 [0, 79] {8, 21}	11 [0, 66] {6, 19}	0 [0, 10] {0, 1}	0 [0, 13] {0, 4}
2000	15 [0, 382] {9, 26}	11 [0, 80] {6, 21}	0 [0, 26] {0, 1}	2 [0, 310] {0, 5}
All yrs	median: 13	median: 10	median: 0	median: 1

on by the Examiner, but may also include references submitted by the applicant on an "Information Disclosure Statement" (IDS). When the number of references is in the double digits (or more!), some are probably from an IDS. Table B-3 shows that IDSs have definitely been getting longer.<sup>12</sup> Consider especially the number of references on the patent in the 75%ile, and the number on the highest patent. For 1990-92 these figures were 17 and 31, respectively. In the year 2000 (admittedly with a larger sample), they were 26 and 382.

**TABLE B-4 - Number of Claims**

TABLE B-4 shows that the number of claims in class 705 patents is increasing. The median number of claims in a 705 patent is now about 20. In the early 1990s it was 16. (Whether "claim inflation" is present in other classes, I have yet to study.)

The data concerning number of claims present a good lesson in small sample statistics and why the median may be more useful than the average. For example, in 1998 the high patent had 160 claims. The sample size was 35, so this one patent "contributed" 4 claims to the average (28 claims/patent) for that data set.

The number of claims is an interesting parameter, but not one that is especially related to *State Street*.

**C. Survey of Litigation Rates**

Tables C-1 and C-2 show "Litigation Rates." The relative numbers are probably reliable, but the absolute numbers must be taken with a good pinch of salt. This stems from the way that a patent's litigation status appears in LEXIS. To have a "Notice of Litigation" in the LIT-REEX field on LEXIS, the following must have occurred: (1) a Notice of Litigation was filed by the Court with the PTO in accordance with 35 USC § 290, (2) that notice was recorded by the PTO, and (3) LEXIS put the information in its database. The numbers of litigated patents are therefore dependent on the combined efforts of the courts, the PTO, and LEXIS. Interestingly, there was no Notice of Litigation as of 2/5/01 for the *amazon.com* patent 5,960,411, or the *Signature* patent 5,193,056, to name only two whose status as "litigated" is well-known. Presumably, however, the rate of failure to record notices of litigation is the same for all classes. Thus the relative numbers — comparisons of the rates — are likely to be reliable.

Year(s)	# of patents	Number of Claims		
		Low	Med	High
1990-93	(32)	2	16	48
1994-97	(50)	4	18	68
1998	(35)	3	19	160
1999	(37)	4	20	76
2000	(123)	1	20	111
1990-2000	(277)	1	20	160

**TABLE C-1**

**Litigation Rates of Issued Patents in Four Classes, 2000-2001**

TABLE C-1 shows the litigation rates for patents in the four classes presented in part A (Table A and Graph 1) above. (An earlier version of Table C-1 is available at 609 PLI/Pat [see n.6] at 123.) The survey includes all patents on the LEXIS database, which goes back to 1971.

Through February 2001, class 705 patents were

- about **four** times as likely to be litigated as were patents in "old tech" class 318,
- about **three** times as likely to be litigated as biotech patents (class 435),
- about **two and a half** times as likely to be litigated as computer graphics patents (class 345).

The litigation rates of the three other classes appear to be roughly in order of the age of the associated technologies: "old" technology 318 patents are least likely to be litigated, biotech 435 patents are in the middle, and computer graphics 345 patents are at the top.

**TABLE C-2**

**Litigation Rates of Patents with and without the Word "Software"**

On 2/5/01 I surveyed all the patents on LEXIS issued between 1991 and 2000, divided into two 5-year periods, and compared the litigation rates of those which contained the word "software" (anywhere in the patent) with those that did not. See TABLE C-2. Although this is a highly unscientific way to segregate out software inventions, the data may make for some lively lunchtime conversation (or a question on Michael Feldman's *Whad'Ya Know*). For newer patents (issued between 1996 and 2000), the litigation rate of "software"-mentioning patents is about

Class	Date Data Collected	# pats issued	# lit	% lit
705	2/6/00	3,186	53	1.7
	6/20/00	3,644	65	1.8
	2/5/01	4,151	87	2.1

Increase in issued patents - 1 year (2/6/00 to 2/5/01):  
about 1000 patents (30%)

Class	Date Data Collected	# pats issued	# lit	% lit
345	2/6/00	20,007	159	0.79
	6/20/00	21,183	166	0.78
	2/5/01	23,053	186	0.80

Increase in issued patents - 1 year (2/6/00 to 2/5/01):  
about 3000 patents (15%)

Class	Date Data Collected	# pats issued	# lit	% lit
318	2/6/00	18,223	77	0.42
	6/20/00	18,561	78	0.42
	2/5/01	19,100	88	0.46

Increase in issued patents - 1 year (2/6/00 to 2/5/01):  
about 1000 patents (5%)

Class	Date Data Collected	# pats issued	# lit	% lit
435	2/6/00	43,624	288	0.66
	6/20/00	45,602	290	0.63
	2/5/01	49,128	334	0.68

Increase in issued patents - 1 year (2/6/00 to 2/5/01):  
about 5500 patents (13%)

	Total	#litigated	%litigated
A. Patents issued between 1991 and 1995 (inclusive)			
"software"	25,865	384	1.48
No "software"	472,137	2,913	0.62
All	498,001	3,297	0.66
B. Patents issued between 1996 and 2000 (inclusive)			
"software"	73,396	492	0.67
No "software"	613,911	2,029	0.33
All	687,387	2,521	0.37

**two times** that of the software-never-mentioned patents. For older patents (5 to 10 years old), the comparative rate is almost **two and a half times!**

\* \* \*

BMPs and S-IBMPs, especially if they are also SWPs, may be different from other patents, but maybe only because their owners and their owners' competitors are more litigious. Whether the historical record shows the same thing for other technologies at comparable points in their development remains to be studied. Still, from what I know, such as Mr. Ford's attitude (see n.1), or the steamboat story in the early days of this country,<sup>13</sup> I suspect that history is repeating itself here: What is happening is not new, and it will get old pretty soon.

## ENDNOTES

1. BMPs may be pronounced “bimps” or “bumps,” and “software-implemented business method patents” (S-IBMPs) may be called sigh-BMPs. It appears that BMP critics have not suggested this acronym and a pronunciation for it (or anyway I couldn’t find any who did when I searched Westlaw, Lexis and the web via an Alta Vista on 3/27/01). Indeed, a web search for English language sites that mention both “business method patents” and “bmp” netted only two hits, both from Japan: [www.thebmp.com](http://www.thebmp.com) where just about the only English words are “business model patent,” and a link to a Japanese newsletter from Hosei University on business method patents: <http://www.orions.ad.jp/c/urls/word/u/n-iversivty.html>.

The acronym pronunciation is not meant to hold BMPs up to ridicule or to imply that business method patents are the bumps on the road of progress. (It is simply an alternative for the mouthful “business method patents” and even faster to say than B-M-P) I find BMPs no worse or better than other patents and firmly believe that the patent system is on balance a force for good in the world. I am on the same side as Joseph N. Hosteny, *The Sky is Falling; or Over-reaction to the Anecdote*, IP TODAY, May 2000.

Greg Aharonian apparently is not. He may count himself on the side of patent system foes like Henry Ford, who was quoted in a 1921 interview as saying: “I believe absolutely in free competition, and in abolishing patents, which kill competition.” (See Judson C. Welliver, *Henry Ford, Dreamer and Worker*, LXVI THE AMERICAN REVIEW OF REVIEWS 431, 493 (November 1921)). Curiously, however, the site index of Aharonian’s [www.bustpatents.com](http://www.bustpatents.com) when I visited it did not include “business method patents” under the letter “B.” The only references to BMPs was by the full phrase, never the acronym. Perhaps this stems from the fact that Aharonian’s main targets are “software patents.” Those I call SWPs, pronounced “swaps,” but when the discussion covers software copyrights (SWCs, pronounced swicks) and things like trademarks on GUI icons, the term “software intellectual property,” abbreviated SWIP and pronounced “swipe,” is appropriate.

2. Jerry Reidinger, of the Seattle firm of Perkins, Coie, discussed this point in his excellent presentation in June 2000 in San Francisco at the PLI conference “Patenting the New Business Model.”
3. The PTO’s report entitled “Automated Financial or Management Data Processing Methods (Business Methods),” known also as the “White Paper on Business Method Patents,” <http://www.uspto.gov/web/menu/busmethp/index.html>, last modified 7/20/00, states: “One prominent portion of business method patents is the area of ‘Automated Financial/Management Business Data Processing Method Patents.’ Such automated business methods are found in U.S. Patent Class 705.” (Sec. 2, page 1). The PTO’s new “Patent Business Methods Home Page” announced 3/12/01, <http://www.uspto.gov/web/menu/pbmethod/> also identifies class 705 with BMPs.
4. See, e.g., Roberta J. Morris, *Business Method Patents, Good or Bad, Old or New (and Other Miscellaneous Thoughts)*, 589 PLI/Pat 77, 80 (February 2000). Of course, the lore affects how

people act, perhaps as much as the law does, if not more.

5. <http://www.bountyquest.com/bounties/-displayBounty.php?bountyName=1080>, posted 3/2/01 (available as of 4/2/01, no modification date). Bounties 1079 and 1081 (as of 4/2/01) apply to the same patent.
6. Such sedentary research employs what I call “RISC architecture,” and may be the worse for that fact. Here RISC stands not for “Reduced Instruction Set Computing” but rather for “Rear InSide Chair” or “Restricted to Information you find Sitting at your Computer.” See Roberta J. Morris, *Business Method Patents: Old or New, Good or Bad?*, 609 PLI/Pat 95, 106 and 132 (illustration in book not visible using RISC architecture [my meaning]) (Summer 2000).
7. I began my study in preparation for a PLI talk in February 2000. I have done additional work since then, for other talks and for this article, and I have discussed my research at three PLI conferences and one conference at Georgetown University Law Center. PLI: Patenting the New Business Model, New York February 2000 (see n.4), San Francisco June 2000 (see n.6), and New York February 2001 (Jeffrey A. Berkowitz, Chair). Georgetown: The 14th Annual Advanced Computer and Internet Law Institute, Washington, March 2001 (J. T. Westermeier and E. Robert Yoches, Chairs) (see n.12).

Things have changed in the year or so since I began:

i. Last year I could only look at issued patents. Now, of course, with the 18-month publication statute in effect (see PTO Press Release, “USPTO Publishes First Patent Application: New policy allows agency to publish applications before a patent is granted,” <http://www.uspto.gov/web/offices/com/speeches/01-13.htm> (March 15, 2001)) surveys of applications begin to be possible.

ii. The PTO’s White Paper (see n.3 above), issued last summer, provided some interesting data about 705 patents, supplementing but not really supplanting mine.

iii. My data are (mostly) for patents issued before the PTO’s quality control initiative for “software-implemented business method patents” announced on 3/29/00. (Press Release #00-22, March 30, 2000, *Under Secretary of Commerce for Intellectual Property Dickinson Unveils New Initiative Focusing on Business Method Patents*, available as of 4/2/01 at <http://www.uspto.gov/web/offices/com/speeches/00-22.htm>, last modified 7/27/00) so they are unaffected by the resulting slowdown in 705 issuances (see, e.g., William M. Bulkeley, *Fewer Patents on Methods Get Clearance*, THE WALL STREET JOURNAL A3 (March 21, 2001). I do include some full-year 2000 data (see Tables A and C-1), but my basic 705 survey ended with May 2000 (Tables B-2, B-3 and B-4). Patents issued that month were most likely allowed before the new initiative.

8. See 589 PLI/Pat [see n.4] at 80 or 609 PLI/Pat [see n.6] at 104-105.
9. When I did the first version of the analysis in June 2000, I wanted a smaller sample size than a whole year. I was not sure how difficult it would be to extract, from a LEXIS download, the information I wanted using only wp5.1 macros and tables. (Answer: it is time-consuming but not particularly hard.) I could now complete the other eleven

months, but the general trends are apparent from the May data, and I do not think much additional information or insight would be gained. (In my graphs I have purposely used large symbols for the data points to remind the viewer that these are not exact quantities.)

10. *Biotech Industry Blasts PTO at San Diego Hearing*, Vol. 48 BNA’S PATENT, TRADEMARK & COPYRIGHT JOURNAL 677 (October 20, 1994).
11. Patents can be issued with more than one class, but overlap is not a major problem. During the eleven-year period surveyed here, there were only 3 patents classified in both 705 and 435, and only 4 in both 705 and 318. Class 345 had a much larger overlap with 705: 164 patents. This is less than 1% of the total for 345, but obviously it is a bigger fraction of the 705 patents. I have not done anything special with these patents: all the “double counted” patents are included (twice).
12. For this reason, I (and others) have suggested that the PTO should collect fees based on the size of the application (number of pages, claims, figures, IDS items). The PTO is studying its fee structure as mandated by the American Inventors Protection Act of 1999 (PL. 106-113 § 4204). Comments were solicited in 65 Fed. Reg. 58746 (10/2/00) and have been compiled by the Office of Corporate Planning, U.S. Patent and Trademark Office (unpublished).

My suggestion employs a base fee that allows applicants to file up to a certain number of claims, figures, pages of specification, and references on IDSs. The first additional (whatever) costs a modest amount, but each one after that costs double what the previous one did. Thus the system would allow longer filings when the technology was highly complex, or time constraints required, or bulging pocketbooks permitted, but very large filings would be prohibitively costly. See Roberta J. Morris, *Software and Business Method Patents: Present, Past and Future*, 14TH ANNUAL ADVANCED COMPUTER AND INTERNET LAW INSTITUTE 460, 473-477 (Georgetown University Law Center, March 2001).

13. See Edward C. Walterscheid’s wonderful book TO PROMOTE THE PROGRESS OF USEFUL ARTS (Fred B. Rothman 1998) concerning, among other things, the competition between steamboat inventors Rumsey and Fitch, the litigation between them, and their lobbying efforts for legislative solutions that would help them gain primacy (page 85 et passim).