

#9  
5/16/02

## WHY THE PAPER FILE COLLECTION NEEDS TO BE MAINTAINED AND NOT DESTROYED

My name is Joseph Clawson and I live in McLean, Virginia. I do not claim to represent anyone other than myself in this testimony. Next month will mark 30 years of my life devoted to the Intellectual Property aspects of the patentability of patent claims, patentability determination, and the searching of the Prior Art. In that time I have accessed perhaps 10 to 12 million documents relating to the patentability of claimed subject matter.

I was a patent examiner in the semiconductor and computer static memory technologies from June, 1972, until December of 1997. In February, 1983, I was personally asked by then Asst. Commissioner Frank Burnett to aid the General Counsel's Office of the Copyright Office in formulating a position on integrated circuit mask design. I was co-developer of the semiconductor Class 257 structure classification beginning about 1990; I reclassified the non-volatile floating gate static memory subclass 185 into 33 new subclasses in 1995. Since then I have acted as searcher in numerous litigation cases, both here in the U.S. and overseas; the estimated total of litigation I was involved in is over \$100 million in the last three years alone.

Thus I can speak with some authority as an expert as to the relative merits of the various manners in which the Prior art can be best and most completely recovered, and the judiciousness of the proposed elimination of the paper search files at the U.S.P.T.O. as is stated in the April 9, 2002, Federal Register, Vol. 67, No. 68, pp. 17055-17060.

It is repeatedly stated in the Federal Register that:

“...the paper patent and trademark registration collections are no longer needed for public reference because of the availability of mature and reliable electronic search systems in its public search facilities.”

There is NO EVIDENCE for such an assertion or conclusion.

Further, these “mature and reliable electronic search systems” are never identified. They certainly cannot be the current error prone, unreliable, and inherently logically defective systems which use the present BRS search engine. This is the system which “lost” the patents of months of October and November in early December, 2000, and is the search engine which never could even adequately do it’s original designed purpose of looking up authors in a library catalog. It is unclear if these missing months of October and November, 2000, or other months, have ever been fully “returned.” It is known that the text files of over 100,000 patents from 1971 to the present are also “lost.”

Such assertions in the Register thus appear to fly in the face of the daily experience of myself and others who use - or more properly put “*attempt to use*” - the electronic “search” systems of the USPTO, and who routinely find such “electronic search systems” clearly inferior to the existing classified paper patent library in most applications.

Further, the important existing classified Foreign patent documents and technical Literature paper collections are also NOT available to the public with these “mature and reliable electronic search systems in its public search facilities” now, and there have been no proposals to provide such in the future. Only the current classified paper files provide this essential search resource.

Thus the *prima facie* case of the Register notice has not been made.

Amazingly, using the classified paper search files at the USPTO in a foreign suit, I was able to find better Japanese Prior Art than the Japanese patent examiner in litigation involving a Japanese patent [“kokoku”]. This shows the enormous power and strength of the U.S. classified paper file system, something which cannot be duplicated by using the commercially available “electronic” data or Abstracts which accompany these Foreign references. It is not clear exactly how applications are presently “searched” in Japan, but whatever particular system they use, the U.S. Classified paper file system is clearly superior. As an examiner when classifying foreign patents, we would routinely ignore the Abstract, which was almost always written by someone with little knowledge of either English or the technology involved, and instead rely upon the drawings and brief translation of section(s) of the text for classification purposes. Clearly, no one uses the so-called International Patent Classification system - neither Europe nor Japan. It is largely useless for searching. From my professional experience, only the robust classified U.S. search system provides an adequate basis for determining the differences between the Prior Art and the claims at issue, and only the paper files can do this in

a time effective manner.

Thus we need to preserve and expand not only the U.S. paper files library but also the U. S. Classification system as well.

In the early 1980s many patent examiners had an opportunity to start using electronic database searching, using "key word" search strategies. Their initial enthusiasm was often soon blunted as they found that they could not locate, electronically, the references that they personally knew were there from their manual searching. Others who were expert in the various technologies also came to much the same conclusion. This finding was further buttressed by scientific evaluations such as the March 1985 paper by David C. Blair et al., in the *Communications of the ACM*, "An Evaluation of Retrieval Effectiveness for a Full-Text Document-Retrieval System." This result was repeatedly verified in later studies by others.

While this published paper reports the results done using a generalized database of only 350,000 pages, when applied to a Patent database, another unique problem arises: in many, if not most, cases the invention is never fully described "in the words." The Patent Law requires only that the Specification, including the Drawings, together be understandable and enabling to one of ordinary skill in the art to make and use the invention. "The words," in many if not most cases, merely "flesh out" what is shown in the Drawings and do not replicate "in words" what is in the Drawings, but are ancillary thereto. Thus, in a Patent database electronic search one is often presented the additional problem of "searching" for "words" which were never there to begin with.

Thus "automated electronic searching," or "electronic search systems" while at times useful in a limited manner cannot fully replace an actual properly classified manual paper search file, in many searchers' experience. You cannot, quite literally, "find the references" searching electronically. Only a properly classified paper file can do this.

A more correct way to view the searching of an electronic database using "word search" is to consider that "ALL the information is lost," until you can discover some manner - usually a random process - of getting a portion of it back. In the beginning of the Gulf War, the first night of the attack on Baghdad saw CNN broadcasting a sky filled with anti-aircraft shelling. And all missing their target. They were shooting randomly, blindly into the air - hoping, praying to hit something. But they hit nothing. This is the exact same blind nature of "keyword"

searching. As Mr. Randy Rabin points out [*Intellectual Property Today*, Vol. 9, No. 5, pp.60-63, May 2002, and NOT available "electronically"], in such "keyword" searches "...The searcher is his or her own lexicographer, and search success depends on whether the searcher's verbal imagination is a match for that of the writer of the patent." As above noted, in the Blair et al. paper, there was a staggering electronic loss of about 80% in this small database of 350,000 pages. As the database gets larger, the retrieval rate goes down even further and the error rate goes up. Given the size of the present USPTO database, in the terabytes, it is not seen possible how one can extract the proper information using electronic "word searches."

Many from their own experience have shown that only an unacceptably small percentage of relevant Prior Art could be routinely retrieved electronically, and what was recovered was most often NOT the best, and NOT the most pertinent Prior Art. If one considers a "closed stack" paper search file where "nothing leaves," then one has absolute file integrity, and if properly Classified it then becomes easy for any person who can readily read English to find ALL the pertinent Prior Art in a particular subject area. A complete search and consideration of ALL the relevant documents - absolutely necessary to be in compliance with *Graham vs. John Deere* - then becomes available, and doable, and is available to the ordinary person without any special training.

It has been said that the paper files are not necessary because: "...It [all data and information] is on the Internet."

This is simply not true. While some data is available on the Internet, or other electronic data bases, much if not most of it is certainly not. Many journals have only recently kept their data electronically. The journal *Nature*, for instance, only goes back to January, 1996; the journal *Science*, October 1995. Electronic and print versions routinely differ, sometimes significantly. And from Blair et al. and the followup studies confirming their results, even if it was true that "everything is on the 'Net," no one would be able to locate the requisite information.

The assertion is also made, page 17056, second column, of the FR, that these "electronic search systems" are:

"...user friendly..."

yet admits that considerable training is necessary for their use, at page 17056, third column, and at page 17059, first column of the FR. The Notice further states,

as at page 17057, first column, that:

“There are a steady new stream of customers who use the facilities for a very limited time and for purposes of a fairly narrow scope. There are approximately 300 new users every month.”

Yet due to the extremely arcane, non-intuitive, and difficult interface used for these “electronic search systems,” this system is ***de facto* INACCESSIBLE TO THE ORDINARY PERSON**. Even after “training,” the new user (and even the “experienced” user) will not know if: he has formulated his “question” properly; if the computer is down or dead; if all of the data is available to the computer; or if all of the data hits will be available to him. He cannot look at the **complete** set of data, even assuming *arguendo* that the “computer search system” has all the relevant data at that moment at hand; he must pare down his search to a “few” documents to be displayed electronically.

Thus, if the classified paper search file is destroyed, then the individual Inventor will be forever precluded from searching his own invention. Destruction of the classified paper search file would form an undue, permanent, and irreversible hardship for the small and medium sized inventive entities.

The Register further states that electronic searching and the classified paper search files are “equivalent.” However, they are not.

The electronic display of data is still far inferior to that of paper and no display system exists which can duplicate the resolution of paper. The USPTO uses a minimal display raster of 300 dots/inch [“D.P.I.”] to electronically store and display data; in many cases, involving subscripts and superscripts in mathematical and chemical representations, this is insufficient. The printed paper patent will be perfectly clear; the **electronic facsimile of the patent will not be and will often be ambiguous**. Two 8½ x 11 inch sheets of paper present a display requirement of 5100 x 3300 pixels, an electronic display which does not currently exist. To be able to view a screen for extended periods of time to be comparable to paper requires at least a 100Hz refresh rate. So one has a 16,830,000 pixel requirement with a 1.68Ghz data rate generator requirement, just to be able to reproduce electronically the sub-standard 300D.P.I. of the current electronic storage. **NO SUCH ELECTRONIC DISPLAY AND NO SUCH 1.68GHZ DATA GENERATION CURRENTLY EXISTS**. And this is for the substandard 300 DPI standard currently in use.

The Office has admitted that the labor costs for their Millennium Agreement

with the examining corps which calls for the destruction of the examiner paper files will cost them from between \$20 million and \$30 million per year in increased costs. Yet the examiner paper file system, from an independent study, only costs the Office about \$1.3 million a year - about 0.1% of current budget -, and the Public Search Room files are almost self supporting.

So why would someone spend \$30 million per year to “save” \$1.3 million? As a Performance Based Organization, the Office is supposed to be “run like a business.” This makes no discernable economic or business sense.

Recently a senior Patent Office employee told me: “As soon as they get rid of the paper [files], then they’re shipping examination overseas.” The April, 2002, edition of “POPA News” [Vol. 02, No. 2] also has the headline: “USPTO Moves Forward on Contracting Out Patent Examination.”

Is this the reason why the paper files - which have served the public and the Patent Office so well for two hundred years - have to be destroyed? So that examination can be contracted out overseas? What will happen when the Russian basic-bottle patent is re-introduced and re-patented in this country? What will happen when the Australian basic-wheel patent is re-patented in this country? What recourse will the public and every American corporation have, but to submit to any sort of foreign “green-mail” when the only resource capable of truly protecting the public - the existing classified paper search files - are destroyed?

The destruction of the existing classified paper search files thus have no economic benefit, and would severely impact the public and every American corporation by essentially gutting this most important economic line of defense against bogus litigation, either foreign or domestic.

Thus it is sincerely asked that the Office’s intention of destroying the classified paper search files as proposed in the Register be reconsidered and rescinded. Should the Office ever actually contract out examination overseas - and such is specifically provided for in the A.I.P.A. - then the classified paper files would be the only real defense of the American public against such foreign predation. The Constitution would seem to require such a prudent safeguard as keeping and maintaining the classified paper search files, an irreplaceable treasure, especially when they routinely outperform the electronic search systems and cost virtually nothing to the Office.