

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ORACLE CORPORATION

Petitioner

v.

JOSEPH L. DE BELLIS

Patent Owner

Case IPR2024-00221

Patent No. 6,760,720

DECLARATION OF LUCILLE MARIE DE BELLIS

Exhibit 2002

I, Lucille Marie De Bellis, declare as follows:

1. My name is Lucille Marie (“Missy”) De Bellis, and I live in Hobe Sound, Florida. I am over the age of 18, and I make this declaration based on my personal knowledge.
2. I am not being compensated for this Declaration. I hold no interest in U.S. Patent 6,760,720, which I understand is the subject of this inter partes review.
3. From February 1997 through December 2002, I was employed as Office Manager for the medical practice of Dr. Joseph L. De Bellis, which operated out of the office located at 80 Sanford Place, Southampton, NY. In that capacity, I was responsible for managing the medical practice and was also a patient advocate. My duties included making purchases at the direction of Dr. De Bellis and handling payments for goods and services purchased on behalf of Dr. De Bellis.
4. During the course of my employment as Office Manager, I lived in a second-floor apartment of the medical office building. I was therefore aware of activities occurring in the office, including after regular business hours.
5. In early 1999, we were using a Quicken database product to support Dr. De Bellis’ medical practice. Dr. De Bellis wanted to be able to search and sort data according to any topic or term, rather than being constrained by the existing database software. I specifically recall Dr. De Bellis discussing his

concepts of the system he envisioned in January 1999 because it was around the time of my birthday, which is January 28.

6. For the next several months following our initial conversations in early 1999, Dr. De Bellis tried to adapt various off-the-shelf software products to improve search and storage of patient data, including trying to adapt Quicken and Excel for that purpose. However, Dr. De Bellis found these products to be unadaptable and unable to perform the functionality he envisioned.
7. In May 1999, Dr. De Bellis began an effort to design a software tool that would embody his concepts and that could be used in his medical practice, with an initial focus on “rolling and tumbling” data in a database as well as different truncation schemes that would take advantage of the human mind’s ability to recognize data as superior to the mind’s ability to recall data.
8. As he continued to work on the design, Dr. De Bellis used terms such as “drilling down,” “hyper-specificity” and “hyper-classification” to describe the process and system he envisioned. Thus, our initial discussions centered around concepts related to truncation, drop down menus, arranging data in a database to make searching for the data more intuitive, and to “rolling and tumbling data.” Dr. De Bellis said the goal was to arrive at the same result

starting at different spots. Dr. De Bellis referred to this process and system as “search-on-the-fly.”

9. Dr. De Bellis described that he wanted to be able to make different views of the data, what he referred to as “rolling and tumbling” the data. He also said that he wanted to “truncate” database entries to allow more intuitive searching and sorting of the data. Dr. De Bellis described his truncation processes, as well as his iterative search processes, as enabling the display of all data entries that might be returned, for example, from a data base search, on a single display page. The truncation process would reduce the number of characters in an entry, which in turn would result in fewer lines of data. As an example, he described a search of all cities in a State as collapsing to the alphabetic spectrum, A – P and R – Z, assuming that State had no city starting with the letter Q. Absence of the letter Q in the returned list would provide information that may be helpful to the user.
10. Dr. De Bellis further explained that the displayed result list could be adapted to fit on any size display. For example, on a large computer screen, the search result list would have more entries than would a list for the same search but displayed on a small screen device such as on a wrist device.
11. At the same time as he conceived of his truncation processes, Dr. De Bellis

conceived of ways to make an iterative search displayable on any display by using an overlapping structure. Figure 10 of the '720 Patent shows this concept. As Figure 10 shows, each successive list slightly overlaps the preceding list. This overlap was forced because the horizontal space available for the display of the iterative search of Figure 10 had been reached; any further searches would have caused even greater overlap – what Dr. De Bellis referred to as “stacking.”

12. For the next several months following our initial conversations in early 1999, Dr. De Bellis tried to adapt various off-the-shelf software products to improve search and storage of patient data, including trying to adapt Quicken and Excel for that purpose. However, Dr. De Bellis found these products to be unadaptable and unable to perform the functionality he envisioned.
13. In May 1999, Dr. De Bellis began an effort to design a software tool that would embody his concepts and that could be used in his medical practice, with an initial focus on “rolling and tumbling” data in a database as well as different truncation schemes that would take advantage of the human mind’s ability to recognize data as superior to the mind’s ability to recall data. However, as was typical with Dr. De Bellis’ medical practice, late May to mid-September was the busiest time of year as the population in the Hamptons increased ten-fold,

and Dr. De Bellis was one of only two plastic surgeons in eastern Long Island. Despite his hectic summer schedule, Dr. De Bellis continued to develop his search-on-the-fly concepts, frequently sharing with me his progress and his frustrations.

14. In August 1999, his frustrations mounting, Dr. De Bellis discussed his concepts with a computer programmer, Adriano Freire, and hired Mr. Freire as an employee of his medical practice for the sole and specific purpose of writing a computer program according to Dr. De Bellis' concepts. As Office Manager, I was aware of all hires. From this point forward, Mr. Freire worked full-time during the week, in the office building in which I worked and lived, and often worked on weekends. Dr. De Bellis also worked days, nights, and weekends, with Mr. Freire, when he was not in surgery, to develop a working example of his search-on-the-fly process and system.
15. Throughout the September-November 1999 timeframe, I witnessed the progress made by Dr. De Bellis and Mr. Freire in developing the search-on-the-fly system.
16. By November 1999, Dr. De Bellis and Mr. Freire had created a database of movies and demonstrated how the database could be searched using the search-on-the-fly process and system. Mr. Freire also produced data bases

from a phone book and from Federal databases related to health plans. The search-on-the-fly system used recognition rather than recall as the basis for its operation. Thus, a user could find the desired results from any starting point, such as searching the first name even if the last name was unknown. The user also could derive useful information from truncated data as well as “missing data” such as the lack of a Q is a truncated list of city names.

17. Dr. De Bellis made several purchases of software programs, computing devices, storage devices and other materials needed by Mr. Freire for the project. As Office Manager, I paid all the bills associated with these purchases, received the shipments, opened the boxes and logged the equipment into a Quicken account along with an indication of its purpose. I specifically remember the purchases because when Mr. Freire began working on the software, I began processing bills for computer equipment and software that were much more frequent and larger in amount than those for computer and software that had previously been purchased for Dr. De Bellis’ practice.
18. I have viewed the various documents identified as Figures 1 - 12 in the October 14, 2024 Declaration of Dr. De Bellis. Many are invoices for advanced computer hardware shipped to the medical office (80 Sanford Place) to be used by Mr. Freire, and my handwriting, or that of one of the other medical practice

employees whom I supervised, annotates many of the invoices. These are the purchases for which I processed the payments as mentioned above.

19. I recall that the following invoices were for purchases directly related to the work Dr. De Bellis and Mr. Freire did in connection with development of Dr. De Bellis' search-on-the-fly system:

- a Zones Business Solutions receipt in the amount of \$1525.09, dated September 27, 1999, reproduced in Dr. De Bellis' Declaration as Figure 2. I recognize the handwriting on the receipt as that of Annemarie Smith, who was another employee of the medical practice. I worked closely with and supervised Annemarie Smith in the back-office operations of the medical practice.
- b Staples receipt in the amount of \$55.77, dated October 5, 1999, reproduced in Dr. De Bellis' Declaration as Figure 3. I recognize the handwriting on the receipt as that of Tara Smith. Tara Smith is Annemarie Smith's daughter and was another employee of the medical practice. As with Annemarie Smith, I worked closely with and supervised Tara Smith in the back-office operations of the medical practice.

- c. PCUpgrades.com receipt in the amount of \$714.66, dated October 5, 1999, reproduced in Dr. De Bellis' Declaration as Figure 8.
- d. Staples receipt in the amount of over \$751.00, dated October 5, 1999, reproduced in Dr. De Bellis' Declaration as Figure 12. I recognize the handwriting on the receipt as that of Tara Smith.
- e. Buy.com receipt in the amount of \$178.79, dated October 9, 1999, reproduced in Dr. De Bellis' Declaration as Figure 4. I recognize my handwriting on the receipt.
- f. Buy.com receipt in the amount of \$1365.11, dated October 13, 1999, reproduced in Dr. De Bellis' Declaration as Figure 5. I recognize my handwriting on the receipt.
- g. Buy.com receipt in the amount of \$271.09, dated October 15, 1999, reproduced in Dr. De Bellis' Declaration as Figure 6. I recognize my handwriting on the receipt.
- h. Compaq invoice in the amount of \$1878.00, dated October 18, 1999, reproduced in Dr. De Bellis' Declaration as Figure 9.
- i. JDR Microdevices invoice in the amount of \$39.96, dated October 25, 1999, reproduced in Dr. De Bellis' Declaration as Figure 11.

- j. Computers4Sure.com receipt in the amount of \$854.30, dated October 29, 1999, reproduced in Dr. De Bellis' Declaration as Figure 10.
- k. Buy.com receipt in the amount of \$100.14, dated October 20, 1999, reproduced in Dr. De Bellis' Declaration as Figure 7. I recognize my handwriting on the receipt.
20. I also recognize additional purchases directly related to Dr. De Bellis' work in developing his search-on-the-fly system in the credit card statement that is reproduced as Figure 1 in Dr. De Bellis' Declaration. These additional purchases include those made from Buy.com (apart from those I have separately listed), Gateway.com, and Sony Vaio Online in September-December 1999.
21. Throughout the September-November 1999 timeframe, I witnessed the progress made by Dr. De Bellis and Mr. Freire in developing the search-on-the-fly system. I recall that Dr. De Bellis and Mr. Freire would frequently become excited about their progress and insist upon showing me what they had done.
22. In September 1999, shortly after hiring Mr. Freire, Dr. De Bellis decided he should seek patent protection for his search-on-the-fly process and system. In early October 1999, Dr. De Bellis spoke with Walter Mondale, at the time a

partner at Dorsey & Whitney LLP in Minneapolis, MN, and asked his advice. Shortly thereafter, a Dorsey & Whitney LLP patent attorney contacted Dr. De Bellis to discuss obtaining patent protection. Dr. De Bellis sent Dorsey & Whitney LLP a retainer check for \$1,000 on November 1. I wrote the check, and Dr. De Bellis signed it. The check is reproduced as Figure 14 in Dr. De Bellis' Declaration.

23. In October 1999, Dr. De Bellis discussed with me the idea of forming a software company that could be used to produce and market a commercial version of his search-on-the-fly software. In this month, Dr. De Bellis formed Virtual Logistix, Inc. for this purpose, and made Mr. Freire an employee of Virtual Logistix, Inc. I continued to work for the medical practice and also became the Operations Manager (Office Manager) for Virtual Logistix.
24. By November 1999, Dr. De Bellis and Mr. Freire had created a database of movies and demonstrated how the database could be searched using the search-on-the-fly process and system. The system used recognition rather than recall as the basis for its operation. Thus, a user could find the desired results from any starting point, such as searching the first name even if the last name was unknown.

25. As noted above, Dr. De Bellis continued to purchase computer equipment and software to use in developing his search-on-the-fly process and system. In addition to those identified in the credit card statement reproduced as Figure 1 in Dr. De Bellis' Declaration, the following are examples of invoices and receipts for such purchases in December 1999:
- a Warehouse.com receipt in the amount of \$3315.35, dated December 10, 1999, which is being submitted with my declaration as **Exhibit 2005**.
 - b Tallgrass Technologies receipt in the amount of \$1967.00, dated December 15, 1999, which is being submitted with my declaration as **Exhibit 2002**. The purchaser is listed as Adriano Freire of Vitual Logistix, which is the company formed by Dr. De Bellis following the discussion described above.
26. Dr. De Bellis and Mr. Freire met with two patent attorneys from Dorsey & Whitney LLP in Dr. De Bellis' medical office in early December 1999. I made the arrangements for the trip and briefly met the attorneys. I remember the visit occurred before my mother's birthday, which is December 14.
27. During the December 1999 visit, Dr. De Bellis demonstrated a fully functional version of his search-on-the-fly process and system. Submitted concurrently with my declaration as **Exhibit 2007** is Figure 10 to U.S. Patent 6,760,720. I

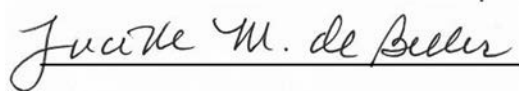
- recognize Figure 10 to be a reproduction of a screenshot of the search-on-the-fly system developed and demonstrated by Dr. De Bellis and Mr. Freire. I recognize it because I specifically recall Mr. Freire importing data from the telephone book for purposes of demonstrating the search-on-the-fly software.
28. Dr. De Bellis and Mr. Freire prepared a CD containing a copy of the search-on-the-fly system that was demonstrated to the attorneys.
29. I understand that the screenshot reproduced in Exhibit 2007 was used as a drawing in support of the first patent application filed on behalf of Dr. De Bellis after the December 1999 visit.
30. After the December 1999 visit, Dr. De Bellis and Mr. Freire continued unabated their efforts to refine and produce a commercial version of the search-on-the-fly process and system.
31. I declare that all statements made herein based on my own knowledge are true and correct to the best of my knowledge and that I made all statements with the knowledge that willful false statements are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.
32. As I stated in my prior Declaration, during a December 1999 visit by his patent attorneys, Dr. De Bellis demonstrated a fully functional version of his search-on-the-fly process and system. Exhibit 2007 is Figure 10 to U.S. Patent

6,760,720, which I previously noted is a marked-up reproduction of a screenshot of an iterative search enabled by the search-on-the-fly system developed and demonstrated by Dr. De Bellis and Mr. Freire. Exhibit 2007 shows an iterative search of the telephone book data base with truncated intermediate results and culminating in a display of (fictional) contact data for Dr. De Bellis.

Declaration of Lucille Marie De Bellis

33. I declare that all statements made herein based on my own knowledge are true and correct to the best of my knowledge and that I made all statements with the knowledge that willful false statements are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date October 14, 2024


Lucille M. De Bellis