

Paper No. ____
Filed: February 24, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ORACLE CORPORATION
Petitioner

v.

DR. JOSEPH L. DE BELLIS
Patent Owner

Case IPR2024-00221
Patent No. 6,760,720

PATENT OWNER SUR REPLY

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Cases

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LIST OF EXHIBITS

1001	U.S. Patent 6,760,720 to De Bellis
1007	U.S. Patent 6,433,797 to Zellweger
2001	First Declaration of Dr. Joseph L. De Bellis, MD
2002	Declaration of Lucille Marie De Bellis
2007	Fig. 10 from U.S. Patent No. 6,760,720

I. INTRODUCTION

Petitioner's Reply asserts Patent Owner did not (1) show prior conception, (2) adequately corroborate the prior conception, (3) show actual reduction to practice, and (4) proceed diligently to filing a patent application. The Reply further asserts that "there are no substantive differences between the '720 claims and the prior art."

II. ARGUMENT

A. *Zellweger* Is Not Prior Art to the '720 Patent

Patent Owner's Response presents corroborated evidence that in January 1999, Dr. De Bellis disclosed the concepts of his inventions to Missy De Bellis and then embarked on a diligent effort to adapt existing computer programs to enable his disclosed concepts. When that first effort did not produce the desired result, Dr. De Bellis began writing the computer program and ultimately hired an experienced computer programmer to generate the code. These efforts produced a commercially-marketable software program in November 1999, which Dr. De Bellis demonstrated to his attorneys in early December, and a patent application in February 2000.

Patent Owner's Response supported by the Declarations of Dr. De Bellis and Missy De Bellis (Exhibits 2001 and 2002, respectively) show with sufficient specificity that Dr. De Bellis had in mind concepts that were "definite, permanent, and complete." In her Declaration, Ms. De Bellis attests to the various features (or elements) of Dr. De Bellis' inventive concepts. Ex 2002 ¶¶ 7-13.

Petitioner's Reply misrepresents the content of Exhibits 2001 and 2002. As one stark example, the Reply states "rather than constituting routine, [sic] reduction to practice work, Patent Owner characterizes this post-January work-which purportedly continued until August or September 1999-as 'unsuitable' and 'frustrating.'" Reply at 5. What Petitioner hides from the Board, however, is that from January to August 1999, Dr. De Bellis first tried to modify existing computer programs (Ex. 2002, ¶6) to implement his inventive concepts. When, in May 1999, he realized that the programs could not be modified in the manner he required, "Dr. De Bellis began ... to design a software tool that would embody his concepts" Ex 2002 ¶7. Thus, the source of Dr. De Bellis' frustration was two-fold: existing programs could not be modified and code writing code was a time-consuming process. The solution was to hire Adriano Freire, an experienced programmer.

In a second misrepresentation of the two Declarations, Petitioner states that Dr. De Bellis "admits that his thought process was nowhere near complete: he 'continued working on developing a system that embodied' his purported 'search-on-the-fly concepts throughout the summer of 1999.'" *Id.* Petitioner's second mischaracterization conflates conception and reduction to practice. Dr. De Bellis conceived of "search-on-the-fly" for searching databases and then embarked on a months-long effort to adapt or write computer code that would enable his inventive concepts; that is, conception followed by reduction to practice. "Working on developing a system that embodied his search-on-the-fly concepts," which Petitioner

admits Dr. De Bellis did, is in fact, “reduction to practice.” Reducing an inventive concept to practice does not mean that Dr. De Bellis’ “thought process was nowhere complete” as Petitioner alleges. In fact, Petitioner’s assertion is directly contrary to Federal Circuit law. *Burroughs Welcome Co. v. Barr Labs*, 40 F.4d 1223, 1228 (Fed. Cir. 1994) (An inventor “need only show that he had the idea, the discovery that an invention actually works is part of its reduction to practice.” (*Applegate v. Scherer*, 332 F.2d 571, 573 (CCPA 1964))).

Petitioner then misconstrues *Burroughs Welcome* quoting from the opinion “no conception where ‘the subsequent course of experimentation, especially experimental failures, reveals uncertainty that ... undermines the specificity of the inventor’s idea....’” Reply at 5, 6. However, *Burroughs Welcome* actually supports Patent Owner’s assertion of conception. Five *Burroughs Welcome* inventors were developing drugs, *Id.*, 1225, that required experimentation and testing, and “the testing confirmed the operability of the inventions, it showed that the ... inventors had a definite and permanent idea of the inventions. It was part of the reduction to practice and inured to the benefit of Burroughs Welcome.” *Id.*, 1230. The five *Burroughs Welcome* inventors were aided in their testing by two NIH scientists who “exercised considerable skill in conducting the tests.” *Id.* The analogy between the two NIH scientists and Adriano Freire should be obvious. The NIH scientists conducted the tests of the inventions; Adriano Freire wrote the computer code that enabled Dr. De Bellis’ inventions.

The Response explains that Dr. De Bellis “described his concept [to Ms. De Bellis] for his search-on-the-fly system” and that the system “would allow users to search using criteria of their choice ... and truncate results to allow all results to be ... displayed.” Response at 18. Ms. De Bellis explained that 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.” Ex. 2002 ¶5. These features are recited in, for example, claim 1.

Petitioner excoriates Ms. De Bellis’ declaration for referring to Figure 10 of the ’720 Patent. Reply at 11. However, as paragraph 27 of Exhibit 2002 states, Figure 10, is “a reproduction of a screenshot of the search-on-the-fly system developed and demonstrated by Dr. De Bellis and Mr. Freire” during a presentation to Dr. De Bellis’ attorneys. Necessarily then, the search-on-the-fly program existed prior to the December meeting, and Figure 10 demonstrates a fully developed search-on-the-fly program whose execution corresponds to the method of claim 1 of the ’720 Patent. Thus, the Declaration of Ms. De Bellis, did show sufficient and specific evidence of actual reduction to practice. Ex. 2002 ¶27.

Finally, Petitioner asked to depose Dr. De Bellis and Ms. De Bellis on January 9, 2025. About twelve hours before the scheduled start date and time, Petitioner cancelled the depositions. Patent Owner asks the Board to consider this unprofessional action when judging the Response.

B. The References Fail to Disclose or Suggest All Claim Limitations

Petitioner's Reply advances new invalidity arguments, stating that the display of Author last names shown in scrollable window 85 of Figure 7 teaches the above recited truncating limitation because "all the author names ... fall within the range of the displayed author names." Reply at 22. Petitioner also argues that the Authors list of Figure 6b, window 83 meets the claim 1 truncating limitation. *Id.* at 21.

However, window 85, Figure 7 does not show truncation of author names for authors having last names starting with L, and the list of author letters is not truncation as recited in claim 1 because, as *Zellweger* states, a human, and not a computer, determines the constraints on the content of window 85: "Under the Content List option ... the developer can specify a full word or length of letters ... and the maximum and minimum number of entries." Ex. 1007. 4:26 – 29 (Emphasis added). Thus, *Zellweger* explicitly discloses the Content List 85 of Figure 7 is preconfigured by a human developer of the Zellweger database. Similarly, with Author list 83 of Figure 6b, the developer "can select the length ... [which] in the example given in FIG. 6a ... is set to one. This means there would be a single letter in each tab and there would be 27 entries in the list." *Id.*, 4:22-25.

Simply put, Petitioner equates a database developer's pre-determined size selections of the content of windows 83 and 85 with the claim 1 limitation of a computer truncating the search results. Thus, *Zellweger* does not cure the defects in either *Cochran* or *HyperSQL*.

For the foregoing reasons, Petitioner's challenges to Claims 1 – 7, 15 – 20, and 27 - 30 of the '720 *Patent* should be rejected.

Respectfully submitted,

Dated: February 24, 2025

/Joseph L. De Bellis/
Dr. Joseph L. De Bellis, MD

Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on the date indicated below, a complete and entire copy of this submission was provided by email to Petitioner's counsel via email, as agreed to by Petitioner's Service Information in the Petition submission, by serving the email address of record.

Respectfully submitted,

Dated: February 24, 2025

/Joseph L. De Bellis/
Dr. Joseph L. De Bellis, MD

Patent Owner