UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS INC. Petitioner

V.

VILOX TECHNOLOGIES, LLC. Patent Owner

Case IPR2018-00044

Patent No. 7,302,423

DECLARATION OF LUCILLE MARIE DE BELLIS



I, Lucille Marie De Bellis, declare as follows:

- 1. My name is Lucille Marie ("Missy") De Bellis, and I live in Palm Beach, Florida. I am over the age of 18, and I make this declaration based on my personal knowledge.
- I make this Declaration in support of Patent Owner's Reply to Petitioner's Opposition to Patent Owner's Motion to Amend in the matter of IPR2018-00044.
- I am not being compensated for this Declaration. I hold no interest in Vilox,
 LLC or in the patent that I understand is the subject of this matter.
- 4. My prior Declaration, Exhibit 2022, provides my relevant employment, experience, and connection to Dr. Joseph L. De Bellis, including my acquisition of information and evidence corroborating conception of the inventions disclosed and claimed in U.S. Patents 6,760,720 and 7,302,423, the later patent being the subject of this IPR.
- 5. In addition to the conceptual descriptions noted in my prior Declaration, 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.

- 6. 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.
- 7. 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. **Exhibit 2025**, Figure 10 of the '720 Patent, referenced with my prior Declaration, shows this concept. As **Exhibit 2025** 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."
- 8. 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.

- 9. 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 developed 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.
- 10. 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 2025** 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 2025** 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.



11. 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 22, 2018

Juane M. de Beeler Lucille M. De Bellis

