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Random House, Inc.

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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RANDOM HOUSE, INC., . .

Plaintiff, . .

v.

ROSETTA BOOKS LLC
and ARTHUR M. KLEBANOFF, in his individual capacity and as principal of ROSETTA BOOKS LLC,

Defendants.

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01 Civ.

EXPERT DECLARATION OF ANDRIES VAN DAM

I, ANDRIES VAN DAM, under penalty of perjury, declare as follows:

1. I am Thomas J. Watson, Jr. University Professor of Technology and Education and a-Professor of Computer Science at Brown University, Providence, Rhode Island. As someone who has been working for over thirty years, both in academia and in the private sector, on systems for creating and reading electronic books, I submit this expert affidavit in support of the motion of Random House, Inc. (“Random House”) for a preliminary injunction.

Professional Qualifications

2. I graduated with a B.S. in Engineering Sciences from Swarthmore College with Honors in 1960, and received an M.S. and Ph.D. from the University of Pennsylvania Moore School of Electrical Engineering in Computer and Information Sciences (earning the nation's second Ph.D. in computer science) in 1963 and 1966, respectively.

3. I have been on the faculty at Brown University since 1965, specializing in the field of Computer Science and Technology. I served as the Chairman of the Program in Computer Science @e-dating the creation of a formal academic department in that discipline) from 1976-l 979, and thereafter, from 1979-l 985, as founding Chairman of the Department of Computer Science. I have written and lectured extensively in my fields of specialization; have headed or served on numerous technical advisory boards for entities including Microsoft Research, Gould Electronics, Stellar Computer, and ContextMedia; was Chairman of the Board of Turbine Entertainment; have consulted with numerous additional computer science and technology companies; and have served as a consultant and expert witness in patent and trade secret litigations arising in the computer industry.

4. Much of my professional research has focussed on computer graphics and interactive techniques, as well as so-called "hypertext/hypermedia" research. The latter entails development of techniques to create interactive electronic documents based on text, graphics and other media with embedded hypertext links (e.g., the point and click links that are embedded in documents on the World Wide Web). As a published book author and through my research on document handling, I have learned a good deal about the book publishing business, and have devoted considerable time and energy to considering the formats in which books can be delivered to readers taking advantage of advances in technology.

5. From 1990 - 1996, I served as Co-Founder, Chief Scientist, and Chairman of the Technical Advisory Board of Electronic Book Technologies ("EBT"). EBT made one of the earliest systems (DynaText and its associated products) for publishing and reading electronic books, primarily for the professional document marketplace.

6. I have been awarded the Society for Information Display's Special Recognition Award (1974), the IEEE Centennial Medal (1984), the National Computer Graphics Association's Academic Award (1990), the ACM SIGGRAPH Steven A. Coons Award (199 1), the L. Herbert Ballou University Professor Chair (1992), the ACM Karl V. Karlstrom Outstanding Educator Award (1994), the Thomas J. Watson, Jr. University Professor of Technology, Education and Computer Science Chair (1995), the IEEE James H. Mulligan, Jr. Education Medal (1999), and the ACM SIGCSE Award for Outstanding Contributions to Computer Science Education (2000). I am a Fellow of the Association of Computing Machinery and of the IEEE. I was also inducted into the National Academy of Engineering in 1996, became a Fellow of the American Academy of Arts and Sciences in 2000, and received honorary doctorates from the Technical University of Darmstadt in 1995 and Swarthmore College in 1996.

7. Attached as Exhibit A is a copy of my curriculum vitae, which provides a complete summary of my educational and professional background.

8. Based upon my education, professional training, experience, and research, I have been asked by Random House to express my opinion on the extent to which the concept reflected in today's electronic books ("eBooks") namely, the ability to read text in non-paper format – is a natural extension and outgrowth of technological developments that pre-date 1961, the year, I have been advised, that the earliest publishing agreement involving the works at issue in this lawsuit was entered into. As I discuss below, the eBook in its present incarnation –

namely, the ability to store text in electronic form and subsequently retrieve it through the use of a computerized device – can trace its lineage back to the early methods of automated textual storage and retrieval developed as long as a century ago, as well as to the development of electronic document creation, storage, retrieval and output mechanisms in the 1950s and 1960s. While the commercial realization of the eBook as it now exists is of more recent vintage, its conception from these roots has long been foreseeable. Furthermore, the technological advances discussed herein have altered neither the core intellectual property involved (the author's work) nor the fundamental reading experience (viewing the written word as a means of receiving and digesting ideas and creative expression).

eBooks Have Their Roots In the Early Information Storage and Retrieval Systems

9. Understood in simple terms, today's electronic books, or eBooks, provide a non-paper reading experience enabled by the electronic storage of a full text of a work and the ability of the user to retrieve and read such text. As a technical matter, eBooks are created by the publisher, or its licensee, by converting digitized text into a format readable by software residing on a desktop computer, laptop computer, personal digital assistant ("PDA") (e.g., Palm Pilot), or handheld dedicated eBook reading device (e.g., Gemstar's REB 1200).

10. The conceptual underpinnings of today's eBook date back to the early automated text storage and retrieval systems, particularly microfilm and microfiche, developed in the nineteenth and early twentieth centuries. Microfilming, or microphotography, is a mechanical process by which, *inter alia*, pages of books, newspapers, and magazines can be photographed, reduced in size (often to just one percent of the original) and stored on strips of film (microfilm) or sheets of film (microfiche). Prior to the advent of the computer, microfilm

and microfiche were retrievable by and could be read on devices that enlarged the film onto a screen and allowed a viewer to flip through the stored pages of text.

11. In 1945, Vannevar Bush, President Roosevelt's Science Advisor, in an Atlantic Monthly article titled *"As We May Think,"* proposed the creation of a more sophisticated microfilm reader, which he called the "memex." (See Exhibit B). Bush, referred to by some as the father of the eBook, envisioned the memex as "a device in which an individual stores all his [or her] books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility." (Id. at 11). Using a memex, a reader would simply have to tap a book's code on the memex's keyboard, and the microfilm version of the book would promptly appear.

12. In the 1950s and 1960s, computer scientists, including Douglas Englebart, J.C.R. Licklider, Theodor Nelson, Alan Kay, and I saw the potential of combining Bush's ideas for storage and retrieval of text with the burgeoning computer industry. In fact, our ensuing research in this area was predicated on the certainty that, at some point, computers would have the memory and speed sufficient to store entire books, and even entire libraries as Bush had predicted, and would also have an output device capable of showing the text on a screen.

13. Englebart, Nelson, and I focused our research and our scholarly writing on the creation of information storage and retrieval systems that would allow people to do all of their reading, writing, and communicating on computers. The implementation of our ideas was facilitated by the introduction, by 1961, of computer time-sharing, which allowed many people to retrieve and read information, stored on one mainframe computer, on numerous computer screens located in different locations.

14. Our efforts in computer information storage and retrieval came to fruition by the late 1960s. By 1967, my students and I had created HES, the Hypertext Editing System, at Brown University. Nelson served as both our inspiration and our advisor. Similarly, by 1968, Englebart debuted oNLine System (NLS), on which he had been working since 1962. Both of these systems, among their many other advanced features, allowed text to be read on a computer screen.

15. Conventional time-sharing systems, and especially Englebart's NLS, HES, and FRESS (the second text storage and retrieval system my students and I created), are also noteworthy, because by the late 1960s, computer manuals for these systems, as well as other forms of technical and non-technical documentation, were stored and could be retrieved and read on computer screens of various sizes and formats. Additionally, using FRESS, students in a section of a 1976 poetry class at Brown University read poems and other critical materials on the computer, rather than on paper. It was after this class, in the late 1970s, that I coined the term "electronic book," from which the abbreviation eBook is derived.

16. Kay was also instrumental in bringing Bush's ideas to fruition. In 1968, he articulated a new storage and retrieval device which he called the Dynabook. Kay envisioned that the Dynabook would be the size of a three-ring binder and would have a multipurpose screen that a consumer could use for both reading and writing. His vision of a Dynabook is seen by many as foreshadowing the first portable eBook reading device and also served as a template for the personal computer.

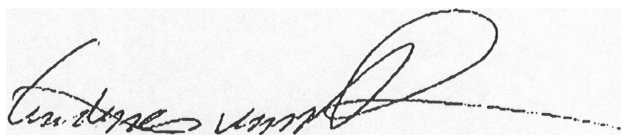
17. By 1971, Michael Hart, a student at the University of Illinois and later a computer consultant, had started Project Gutenberg, a project devoted to creating, *inter alia*, electronic books of public domain works that would be stored, retrieved, and read on computers.

Project Gutenberg began by making available to the public computer files of smaller texts (*e.g.*, the De&ration of Independence and the United States Constitution) due to computer storage limitations but, by the middle of the 1970s, it had begun making available to the public entire books in electronic form (e.g., the Bible, Shakespeare, and Alice in Wonderland). Today, Project Gutenberg continues to create electronic books of public domain works, and is one of numerous several web sites that maintains electronic books in an electronic library OR the Internet.

18. To summarize, today's electronic books, insofar as they enable a consumer to read in electronic form entire texts of *works* traditionally offered by publishers in paper form, are, in my opinion, the natural extension and outgrowth of the early information storage and retrieval systems of the nineteenth and early twentieth centuries and their subsequent computerization during the 1950s and 1960s. While the fundamental reading experience. with respect to this category of eBooks remains the same. the new technological advances have enabled improved efficiencies, cost savings, and an ability to store books and even entire libraries on portable devices (*e.g.*, on the hard drive of a laptop computer). Moreover, the new technological advances have expanded the potential readership of authors' works, by offering new eBook formats for the convenience of consumers as alternatives to more established paper reading formats.

I declare under penalty of perjury under the laws of the United States of America, as prescribed in 28 U.S.C. § 1746, that the foregoing is true and correct.

Executed on: February 26, 2001



Andries van Dam