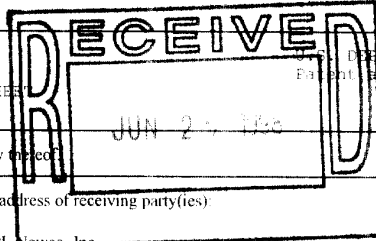


07-10-1998



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1/2 SHEET

or copy attached

To the Honorable Commissioner of Patents:

1. Name of conveying party(ies):

VPL Research, Inc., a California corporation

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies):

Name: VPL Research, Inc.

Internal Address:

Street Address: 2049 Century Park East, Suite 3400, c/o Mark J. Mihanovic, Esq., at McDermott, Will & Emery

City Los Angeles State CA ZIP 90067

Additional name(s) & address(es) attached? Yes No

3. Nature of Conveyance:

- Assignment
- Merger
- Security Agreement
- Change of Name
- Other

Execution Date: Mar 27, 1997

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of this application is:

A. Patent Application No.(s) 08/354,018 Filed 12/05/94

B. Patent No.(s)

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: B. Noel Kivlin

Internal Address: Conley, Rose & Tayon, P.C.

Street Address: P.O. Box 398

City Austin State TX ZIP 78767-0398

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

- Enclosed
- Authorized to be charged to deposit account

8. Deposit account number:
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9. Statement and Signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

B. Noel Kivlin
Name of Person Signing
Reg. No. 33, 929

Signature

Date

6-22-98

Total number of pages: 4

MED 6-25-98

PATENT ASSIGNMENT AGREEMENT

WHEREAS, VPL Research, Inc., a California corporation (hereinafter "assignor"), the sole and exclusive owner, by assignment, of the United States Patents and Patent Applications listed below and set forth on Schedule 1.1.1 and the inventions described therein and herein.

1. U.S. Patent No. 4,542,291, optical flex sensor, issued September 17, 1985.
2. U.S. Patent No. 4,988,981, computer data entry and manipulation apparatus and method, issued January 28, 1991.
3. U.S. Patent Application No. 08/480,236, computer data entry and manipulation apparatus and method, filed June 7, 1995; continuation of 08/356,123, filed December 15, 1994, abandoned; continuation of 08/130,813, filed October 5, 1993, abandoned; a continuation of 07/863,396, filed March 20, 1992, abandoned; a continuation of 07/546,333, filed June 29, 1990, abandoned; a division of 07/317,107, filed February 28, 1989, now U.S. Patent No. 4,988,981, issued January 28, 1991; a continuation of 07/206,930, filed March 17, 1987, abandoned.
4. U.S. Patent No. 4,937,444, optical flex sensor, issued on June 26, 1990; continuation of 07/218,426, filed July 8, 1988, abandoned; continuation of 06/892,888, also filed July 29, 1986, abandoned; continuation of 06/745,035, filed August 1, 1985, abandoned; divisional of 06/428,322, filed September 29, 1982, abandoned.
5. U.S. Patent No. 5,097,252, motion sensor which produces an asymmetrical signal in response to symmetrical movement, issued March 17, 1992; continuation of 07/029,934, filed March 24, 1987, abandoned.
6. U.S. Patent Application No. 08/335,302, tactile feedback mechanism for a data processing system, filed October 27, 1992; continuation of 07/746,292, filed August 13, 1991, abandoned; continuation of 07/315,252, filed February 21, 1989, abandoned; continuation of 07/029,930, filed March 24, 1987, abandoned.
7. U.S. Patent No. 5,588,139, virtual reality network, issued December 24, 1996; continuation of 07/535,253, filed June 7, 1990, abandoned.
8. U.S. Patent No. 5,521,373, position tracking system, issued May 28, 1996; continuation of 07/854,769, filed March 20, 1992, abandoned; continuation of 07/562,090, filed August 2, 1990, abandoned.
9. U.S. Patent Application No. 08/319,026, low cost virtual reality system, filed October 6, 1993; continuation of 08/165,045, filed October 6, 1993, abandoned; continuation of 07/888,472, filed May 21, 1992, abandoned; continuation of 07/621,127, filed November 30, 1990.

10. U.S. Patent No. 5,546,530, method and apparatus for rendering graphical images issued August 13, 1996; continuation of 08/170,566, filed October 5, 1993, abandoned; continuation of 07/621,450, filed November 30, 1990, abandoned.
11. U.S. Patent Application No. 08/354,018, radio frequency tracking system, filed December 5, 1994; continuation of 08/155,359, filed October 6, 1993, abandoned; continuation of 07/863,312, filed March 20, 1992, abandoned; continuation of 07/621,447, filed November 30, 1990, abandoned.
12. U.S. Patent Application No. 08/165,046, absolute position tracker, filed October 6, 1993; continuation of 07/938,560, filed August 28, 1992, abandoned; continuation of 07/821,276, filed January 10, 1992, abandoned; continuation of 07/620,425, filed November 29, 1990, abandoned.
13. U.S. Patent No. 5,587,936, method and apparatus for creating sounds in a virtual world, issued December 14, 1996; continuation of 07/621,446, filed November 30, 1990, abandoned.
14. U.S. Patent No. 5,559,995, method and apparatus for creating a virtual world, issued September 24, 1996; continuation of 07/621,474, filed November 30, 1990, abandoned.
15. U.S. Patent No. 5,588,104, method and apparatus for creating virtual worlds, issued December 24, 1996; continuation of 07/931,881, filed August 13, 1992, abandoned; continuation of 07/620,490, filed November 30, 1990, abandoned.
16. U.S. Patent Application No. 08/413,940, method and apparatus for creating virtual worlds, filed March 30, 1995; continuation of 08/302,471, filed September 12, 1994, abandoned; continuation of 08/141,205, filed October 1, 1993, abandoned; continuation of 07/620,429, filed November 30, 1990, abandoned.
17. U.S. Patent Application No. 08/648,420, method and apparatus for displaying a virtual world, filed May 25, 1996; continuation of 08/128,112, filed September 29, 1993, abandoned; and
18. U.S. Patent Application No. 08/351,741, virtual image display device, filed December 8, 1994; continuation of 08/141,204, filed October 6, 1993, abandoned; continuation of 07/725,032, filed July 3, 1991, abandoned.

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PATENT
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WHEREAS, VPL Newco, Inc., a California corporation (hereinafter "assignee"), whose address is c/o Mark J. Mihanovic, Esq., McDermott, Will & Emery, 2049 Century Park East, Ste. 3400, Los Angeles, California 90067, is desirous of acquiring the right, title and interest in, to and under said Patents and Patent Applications and the inventions covered thereby:

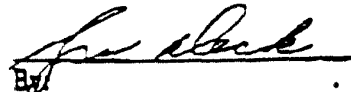
NOW, THEREFORE, in consideration of the payments received under the Asset Purchase Agreement between assignor and assignee dated February 6, 1997, the receipt of which consideration is hereby acknowledged, assignor has sold, assigned, and transferred, and does hereby sell, assign, and transfer the entire right, title and interest in and to the above-mentioned patents, inventions, application for Letters Patent, and any and all applications for Letters Patent in the United States of America and in all foreign countries and in all Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said patents or applications, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by assignee, for its own use and behoof and the use and behoof of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents, may be granted, as fully and entirely as the same would have been held and enjoyed by the assignor, had this sale and assignment not been made.

AND for the same consideration, assignor hereby covenants and agrees to and with the assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, assignor is the sole and lawful owner of the entire right, title and interest in and to the said patents, inventions and the applications for Letters Patent above-mentioned, and that the same are unencumbered and that assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND assignor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent or Patents of the United States on said inventions or resulting from said applications and any continuations, divisionals and reissues thereof to assignee as assignee of the entire interest, and hereby covenants that it has full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreements inconsistent herewith.

Dated: Mar 27, 1997

VPL RESEARCH, INC.


By _____
Title: Trustee in
Bankruptcy

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