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FORM PTO-1595 RECO	09-12-2000 U.S. DEPARTMENT OF COMMERCE
MB No. 0651-0011 (exp. 4/94)	Patent and Trademark Office
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To the Honorable Commissioner of Patents and	101453943 original documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
	Name: New Dimension Research & Instrument, Inc.
Zhijiang Hang 🔀 🕺	
Zhijiang Hang Hiroshi Miyazawa Additional name(s) of conveying party(ies) attached?	Internal Address:
Additional name(s) of conveying party(ies) attached?	
3. Nature of conveyance:	
Assignment Merger	Street Address: 400 West Cummings Park
Other	City: <u>Woburn</u> State: <u>MA</u> ZIP: <u>01801</u>
Execution Date: December 1, 1999	Additional name(s) & address(es) attached?
4. Application number(s) or patent number(s):	
If this document is being filed together with a new applicat	tion, the execution date of the application is:
A. Patent Application No.(s)	B. Patent No.(s)
Α. Γαιοπελφρησαιοπτισ.(σ)	D. Fatoric Holloy
09/439,880	
Additional numbers	atlached? 🔲 Yes 🔀 No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Thomas P. O'Connell	7. Total fee (37 CFR 3.41)
internal Address: O'CONNELL LAW OFFICE	
	X Enclosed
	Authorized to be charged to deposit account
	-
Street Address: <u>135 Cambridge Street, Suite 10</u>	8. Deposit account number:
City: Burlington State: MA ZIP: 01803	(Attach duplicate copy of this page if paying by deposit account)
DON	OT USE THIS SPACE
9. Statement and signature.	
To the best of my knowledge and belief the foregoing infi	ormation is true and correct and any attached copy is a true copy of
To the best of my knowledge and belief, the foregoing info the original document.	ormation is true and correct and any attached copy is a true copy of
To the best of my knowledge and belief, the foregoing info	TEP.OL August 8,2000
To the best of my knowledge and belief, the foregoing info the original document. Thomas P. O'Connell Name of Person Signing	TEP. OL Signature August 8, 2000 Date
To the best of my knowledge and belief, the foregoing info the original document. Thomas P. O'Connell Name of Person Signing Total number of pages includir	Signature Date
To the best of my knowledge and belief, the foregoing info the original document. Thomas P. O'Connell Name of Person Signing Total number of pages includir 9/12/2000 NTHAI1 00000164 09439880 Mail documents to be recorded Commissioner of Parts	TEP. OL August 8, 2000 Signature Date
To the best of my knowledge and belief, the foregoing info the original document. Thomas P. O'Connell Name of Person Signing Total number of pages includin 9/12/2000 NTHAI1 00000164 09439880 Math documents to be recorded Commissioner of Patent Washing	Signature August 8, 2000 Date Date August 8, 2000

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(Rev. 6-93) PATENTS ONLY OMB No. 0651-0011 (exp. 4/94) 1. Name of conveying party(ies):	Patent and Trademark Office
1. Name of conveying party(ies):	
Additional name(s) of conveying party(ies) attached? Yes	No X
2. Name and address of receiving party(ies):	
Name: Kenwood Corporation	
Internal Address: 1-14-6 Shibuya	
Street Address: Shibuya-ku	
City: Tokyo, Japan State: ZIP:	<u> </u>
Name:	
Street Address: City: State: ZIP:	
Additional name(s) & address(es) attached? Yes No X	
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, the execution date of the	application is:
A. Patent Application No.(s) B. Patent No.	o.(s)
Additional numbers attached? Yes No X	Page 20t2

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ASSIGNMENT AND LICENSE AGREEMENT

THIS AGREEMENT is made this day of <u>December</u>, 1999 by and between the following Parties: Kenwood Corporation (hereinafter "Kenwood") having principal offices at 1-14-6 Shibuya, Shibuya-ku, Tokyo, Japan; New Dimension Research & Instrument, Inc. (hereinafter "NDR") having principal offices at 400 West Cummings Park, Woburn, Massachusetts, USA; Victor Lazarev (hereinafter "Lazarev") having a residential address at 6 Baron Park Lane, Apt. 14, Burlington, Massachusetts 01803, USA; Zhijiang Hang (hereinafter "Hang") having a residential address at 4 Liberty Avenue, Lexington, Massachusetts 02173, USA; and Hiroshi Miyazawa (hereinafter "Miyazawa") having a residential address at 20-7 Enoki-Cho, Tokorozawa, Saitama 359-1104, Japan.

I. BACKGROUND

1.01 Lazarev and Hang devised of an invention that was disclosed and claimed in U.S. Patent Application Serial No. 09/191,022 entitled "Optical System with Interactive Data Capability" (hereinafter "Invention A"). The same invention is now the subject of an equivalent application under the Patent Cooperation Treaty bearing international Application No. PCT/US 99/26855 and an equivalent Taiwanese application bearing Filing Number 88119894. Lazarev and Hang have assigned all right, title, and interest in Application Serial No. 09/191,022 and in all equivalent foreign applications to NDR. NDR has or will have exclusively licensed all of its right, title, and interest in Application Serial No. 09/191,022 and in all equivalent foreign applications to New Dimension Technology, Inc. (hereinafter "NDT").

1.02 Miyazawa conceived of a particular improvement over Invention A. which improvement essentially comprises the basic concept of correcting optical magnification error without relative movement by assigning a plurality of VCSELs to a single track on an optical recording medium with the VCSELs each having a different coordinate in a direction perpendicular to the single track (hereInafter "Invention B"). Lazarev and Hang devised of a plurality of improvements over Invention B including optimized arrangements of VCSELs, for instance, in a hexagonal lattice relationship and according to specific formulas and layouts (hereinafter "Invention C"). Still further, Miyazawa, Lazarev, and Hang together developed a particular VCSEL arrangement that is depicted as FIG. 6K in each

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of the above-referenced patents (hereinafter "Invention D"). Inventions B, C, and D were disclosed and claimed in equivalent applications U.S. Serial No. 09/439,880, PCT International Application No. PCT/US 99/26856, and Talwanese Filing Number 88119895, each in the individual names of Lazarev, Hang, and Miyazawa and each entitled "Optical Pickup and Servo Control System for Digital Data Storage."

1.03 The Parties now share the mutual desire that all right, title, and interest of Lazarev, Hang, and Miyazawa in Inventions B, C, and D be assigned in equal proportion to Kenwood and NDR. The Parties further desire that Kenwood grant to NDR a perpetual, irrevocable, and royalty-free exclusive license of Kenwood's right, title, and interest in inventions B, C, and D subject only to the reservation by Kenwood of the rights to make, use, sell, and otherwise exploit inventions B and D, except as they make use of Invention C. NDR has or will have exclusively licensed all of its right, title, and interest in Inventions B, C, and D to NDT.

1.04 Therefore, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Kenwood, NDR, Lazarev, Hang, and Miyazawa agree to the terms set forth below.

II. PATENT ASSIGNMENT

2.01 Lazarev, Hang, and Miyazawa hereby sell, assign, and transfer unto each of Kenwood and NDR, in equal proportion, as assignees, and the successors, assigns, and legal representatives of Kenwood and NDR, the entire right, title, and Interest of Lazarev, Hang, and Miyazawa in and to the Invention entitled "Optical Pickup and Servo Control System for Digital Data Storage" including all right, title, and interest in U.S. Application Serial No. 09/439,880, PCT International Application No. PCT/US 99/26856, and Taiwanese Application Filing Number 88119895, and all Letters Patent that may be obtained for that invention in all countries including any continuation, division, renewal, or substitute thereof, and as to any reissue or re-examination thereof.

2.02 Lazarev, Hang, and Miyazawa hereby request that any and all Letters Patent for the invention assigned in Section 2.01 of this Agreement be issued to Kenwood and NDR, their successors, assigns, and legal representatives, or to such nominees as they may designate.

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2.03 Lazarev, Hang, and Miyazawa each hereby agree that, when requested, he will, without charge to Kenwood or NDR, sign all papers, take all rightful oaths, and do all acts that may be necessary, desirable or convenient for securing and maintaining patents for the invention in any and all countries and for vesting title thereto in Kenwood and NDR, their successors, assigns, and legal representatives or nominees.

2.04 Lazarev, Hang, and Miyazawa hereby authorize and empower Kenwood and NDR, their successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for the invention, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from them.
2.05 Lazarev, Hang, and Miyazawa hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document that may be required in any country for any purpose and more particularly in proof of the right of Kenwood and NDR or any nominee of Kenwood and NDR to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for the right of the right of priority for any purpose and more particularly in proof of the right of Kenwood and NDR or any nominee of Kenwood and NDR to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it

2.06 Lazarev, Hang, and Miyazawa hereby covenant with Kenwood and NDR, their successors, assigns, legal representatives, and nominees that the rights and property herein conveyed are free and clear of any encumbrance, and that they each have full right to convey the same as herein expressed.

III. PATENT LICENSE

3.01 Subject only to the exceptions and reservations set forth in Section 3.02 of this Agreement, Kenwood hereby grants NDR and NDR hereby accepts an exclusive, royalty-free license to all of Kenwood's right, title, and interest in and to the invention entitled "Optical Pickup and Servo Control System for Digital Data Storage" as it is defined by the claims of U.S. Application Serial No. 09/439,880, PCT International Application No. PCT/US 99/26856, and Taiwanese Application Filing Number 88119895, and all Letters Patent that may be obtained for that Invention in all countries including any continuation, division, renewal, or substitute thereof, and as to any reissue or re-examination thereof

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PATENT 00/80/80 **PATENT** 00/80/80 **REEL: 011049 FRAME: 0514** for the entire life of any such Letters Patent.

3.02 Notwithstanding the exclusive grant set forth in Section 3.01 of this Agreement, Kenwood nonetheless reserves the royalty-free right to make, use, and sell devices embodying the inventions described above as inventions B and D, PROVIDED, HOWEVER, that such device does not take advantage of the inventions described above as invention A or invention C.

3.03 Kenwood expressly acknowledges and agrees that it gains no rights under this Agreement to make, use, or sell the invention described above as invention A.

3.04 Kenwood also expressly acknowledges and agrees that the making, using, and/or selling of any devices embodying the inventions described above as inventions A and C will be governed by the provisions of the Research and Development Agreement between Kenwood and NDT, particularly Section 2 thereof.

3.05 Kenwood hereby nominates NDR and its legal representatives, nominees, and assigns to take all actions and to sign all documents necessary to carry forth the terms of this Agreement.

IV. MISCELLANEOUS

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4.01 Assignment. This Agreement shall inure to the benefit of, and be binding upon, the Parties and their respective successors and assigns.

4.02 Amendment. This Agreement may be amended, modified, or supplemented only by a written instrument specifically referring to this Agreement that is signed by duly authorized officers of each affected Party.

4.03 Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the Commonwealth of Massachusetts and the United States of America.

4.04 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall constitute an original instrument but all of which, taken together, shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives on the date first written above.

> Assignment and License Agreement Page PAGE 4

Kenwood Corporation

By: Title: Rovery Depe. /at Marten

New Dimension Research & Instrument, Inc.

7fie hiara

Victor Lazarev

12/1/99 Zhijiang Hang

Hroshi Miyezawa

RECORDED: 08/15/2000

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