To the Honorable Commissioner of Patents and Trademarks:
Please record the attached original document or copy thereof.

1. Name of Party(ies) conveying an interest:
   Tsuyoshi TODA
   Shigeki YAMAZAKI
   Toshimitsu KAKU

2. Name and Address of Party(ies) receiving an interest:
   HITACHI, LTD.
   6, Kanda Surugadai 4-chome
   Chiyoda-ku, Tokyo, JAPAN

3. Description of the interest conveyed:
   Assignment

4. Application number(s) or patent number(s):
   Additional sheet attached? ___ Yes XXX No
   If this document is being filed together with a new application, the execution date of the application is:
   DATE

A. Patent Application No.(s)  
   08/870,405

B. Patent No.(s)

5. Name and address of party to whom correspondence concerning document should be mailed:
   Thomas E. Beall, Jr.
   Fay, Sharpe, Beall, Fagan, Minnich & McKee
   104 East Hume Avenue
   Alexandria, Virginia 22301

6. Number of applications and patents involved: One

7. Amount of fee enclosed or authorized to be charged: $40.00

8. The Commissioner is hereby authorized to charge Deposit Account No. 02-1540 if no check is attached.

9. Execution date of attached document: June 4, 1997

10. To the best of my knowledge and belief, I declare under penalty of perjury under the laws of the United States of America that the foregoing information is true and correct and that any attached copy is a true copy of the original document.

   07/12/1999
   John R. Mattingly
   Name of Person Signing

   40.00 OP

   July 9, 1999
   Date

Total number of pages being submitted: 2
ASSIGNMENT
(譲渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar ($1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by HITACHI, LTD., a corporation organized under the laws of Japan, located at 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo, Japan, receipt of which is hereby acknowledged I do hereby sell and assign to said HITACHI, LTD., its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

United States Patent Application for OPTICAL DISK RECORDING AND RETRIEVING DEVICE

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said HITACHI, LTD., its successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HITACHI, LTD.

Signed on the date(s) indicated beside signatures:

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<tr>
<th>INVENTOR(S)</th>
<th>Date Signed</th>
<th>Witnesses</th>
</tr>
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<tbody>
<tr>
<td>1) Tsuyoshi Toda</td>
<td>June 4, 1997</td>
<td>Hidetada</td>
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<tr>
<td>2) Shigeki Yamazaki</td>
<td>June 4, 1997</td>
<td>Hidetada</td>
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<td>3) Takamaru Hashi</td>
<td>June 4, 1997</td>
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RECORDED: 07/09/1999

PATENT
REEL: 010081 FRAME: 0721