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| (1) Toshio ARITOMI and (2) Minoru KAWASHIMA Additional name(s) of conveying party(iee) attached? No Street Address: 1-1, Mikage-cho, Tokuvama-signature. Street Address: 1-1, Mikage-cho, Tokuvama-signature. City: Yamaguchi-ken Country: Japan Additional name(s) & address(sa) attached? No City: Yamaguchi-ken Country: Japan Additional name(s) & address(sa) attached? No If this document is being filed together with a new application, the execution date of the application is: June 21, 200 A Patent Application No.(s) NEW, filed June 28, 2002 Additional numbers attached? No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: WENDEROTH, LIND & PONACK, L.L.P. Attn: Michael R. Davis , Esq. Street Address: 2033 K Street, N.W., Suite 800 City: Washington, State: DC ZIP: 20006-1021 Do NOT USE THIS SPACE 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. Michael R. Davis , Reg. No. 25, 134 Name of Person Signing Total number of pages including cover sheet DOWN NO. 0951-0011 [exp. 4/94] Do not detech this portion Do not detech this portion Do not detech this portion Total Page AN DEFICIENCY IN THIS ECCOMMISSIONER IS AUTHORS: 10 CHARGE ANY DEFICIENCY IN THIS ECCOMMISSIONER IS AUTHORS: 11 Mikage-cho. Tokuvama Signature. City: Yamaguchi-ken Country: Japan Additional name(s) & address(s) attached? No City: Yamaguchi-ken Country: Japan Additional name(s) & address(sa) attached? No Do Not USE THIS SPACE No. 15 Michael R. Davis attached? No 15 Name of Pages including cover sheet Do Not detech this portion Do not detech this portion Do not detech this portion | | | 42 | Please record the attached original document(s) | | |
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PATENT REEL: 013055 FRAME: 0135

ASSIGNMENT

| | In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Toshio ARITOMI and Minoru KAWASHIMA, both citizens of |
| | Japan, |
| Insert Name(s) of Inventor(s) | |
| | |
| | the undersigned hereby sell(s) and assign(s) to |
| Insert Name(s) of Assignee(s) | TOKUYAMA CORPORATION, a Japanese corporation, |
| Address | of 1-1, Mikage-cho, Tokuyama-shi, Yamaguchi-ken 745-8648, Japan |
| | (hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as |
| | ION-EXCHANGE MEMBRANE |
| Title of Invention | |
| | for which an application for patent in the United States has been executed by the undersigned on |
| Date of Signing | June 21, 2002 |

Application

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

> **PATENT** REEL: 013055 FRAME: 0136

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 2033 K Street, N.W., Suite 800, Washington, DC 20006, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document. In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s). Date June 21, 2002, Name of Inventor Joshio aritomi Date June 21, 2002, Name of Inventor Minoru Kawashima Date ______, Name of Inventor _____ Date _____, Name of Inventor Date ______, Name of Inventor _____ Date _____, Name of Inventor (This assignment should preferably be acknowledged before a United States Consul. If not, then the execution by the Inventor(s) should be witnessed by at least two witnesses who sign here.) Witness Junji Vattori
Witness Satoru Fuchigami **ACKNOWLEDGMENT** } ss This day of , 19 , before me personally came the above-named to me personally known as the individual(s) who executed the foregoing assignment, who did acknowledge to me that he (they) executed the same of his (their) own free will for the purposes therein set forth. Official Signature **SEAL** Official Title The above application may be more particularly identified as follows: U.S. Application Serial No. ______ Filing Date _____ Applicant Reference No. Atty. Docket No.

Title of Invention

RECORDED: 06/28/2002

PATENT REEL: 013055 FRAME: 0137