

U.S. DEPARTMENT OF COMMERCE

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| | as & Halsey | | ۲ | | 3556 | | | | | | |
| To the | Honorable | e Commissione | of Patents and | d Trademar | ks: Pleas | e record the | attached origi | nal documer | nts or copy thereof | | |
| 1. | Name (| of conveying Hirotomo 12 | | 2) | Takash | i ISHIWAI | DA . | 3) | Nobuaki MIT | AMURA | |
| 2. | Name a | and Address | of receiving | party(ies | s): | | | | | | |
| | 1-1, Ka Nakaha | SU LIMITED amikodanaka ara-ku, Kawa awa 211-85 | saki-shi | | | | | | | U.S. PTO | |
| 3. | <u>X</u> | of conveyar Assignmen Security Ag Other: ion Date(s): | t reement | · 11, 2002 | 2; Nover | Merger Change o | | ovember 1 | 1, 2002, respe | ctively. | |
| 4. | (a) (b) | November The title is: s document | is being filed ion date(s) of 11, 2002, re TRANSMISS ELEMENT, OPTICAL A is being filed lication No(s | together of the app spectively SION WA AND WA MPLIFIEI t after filir | with a libilication V. VELEN VELEN R, AND ng of the , fi | is/are: <u>N</u> GTH CHA GTH CHA OPTICAL application | ovember 11 RACTERIS RACTERIS TRANSMIS on: | TICS VAR TICS VAR SSION SY | ovember 26, 20 RIABLE OPTICA BIABLE APPAR STEM, USING | AL ATUS, | |
| 5. | STAAS Attention 700 Ele | and address & HALSEY on: <u>John C.</u> eventh Stree ngton, D.C. | LLP <u>Garvey</u> i, N.W., Suit | | respond | | cerning doc cet: <u>1344.1</u> | | ould be mailed: | | |
| 6. | Total n | umber of app | olications an | d patents | involve | d: <u>1</u> | | | | | |
| 7. | Total fe | ee (37 CFR 3 Enclosed Authorized | 6.41)to be charge | , | • | • | ent) | | | | |
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PATENT REEL: 013708 FRAME: 0450

U.S. ASSIGNMENT

S&H 1/00

| IN CONSIDERATION of the sum of One Dol inventor(s) (hereinafter, "ASSIGNOR") by (Insert Name(s) & Address(es) of ASSIGNEE(S)) | lar (\$1.00), and of other good and va | luable consideration paid to the undersigned | | | |
|--|--|---|--|--|--|
| FUJITSU LIMITED of 1-1, Kamikodanaka 4-cho | me, Nakahara-ku, Kawasaki-shi, Kanag | awa 211-8588 Japan | | | |
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| (hereinafter, "ASSIGNEE"), the receipt of which is I ASSIGNEE the entire and exclusive right, title and i (Title of Invention) | hereby acknowledged, the undersigned Anterest to the invention entitled | ASSIGNOR hereby sells, assigns and transfers to | | | |
| TRANSMISSION WAVELENGTH CHARACTERIS | STICS VARIABLE OPTICAL ELEMENT | , AND WAVELENGTH CHARACTERISTICS | | | |
| VARIABLE APPARATUS, OPTICAL AMPLIFIER | R, AND OPTICAL TRANSMISSION SYS | STEM, USING SAME | | | |
| relating to International Patent Application PCT/IP_executed on even date herewith or, if not so execute | / and/or for which appli d, was: | cation for Letters Patent of the United States was | | | |
| (a) executed on | ; (Insert date of execution | of application, if not concurrent) | | | |
| (b) filed on; | N.W., Washington, D.C. | Any registered attorney of STAAS & HALSEY LLP, 700 Eleventh Street, N.W., Washington, D.C. 20001 (202/434-1500) is hereby authorized to insert in (b) the specified data, when known. | | | |
| and to said application and all Letters Patent(s) of the substitute, reissue or reexamination application base including any extensions thereof (collectively, hereing the ASSIGNOR agree(s), when requested by sain which the ASSIGNEE may deem necessary, desirable including in the preparation and prosecution of said reexamination, or public use proceeding, and in any acts to include but not be limited to executing all passworn testimony, and obtaining and producing evidents. | d thereon, for the full term or terms for wanter, "said application(s) and Letters Find ASSIGNEE and without charge to buildle or expedient, for securing, maintaining application(s) and the issuance of said I litigation or other legal proceeding which pers, including separate assignments and ence. | which the said Letters Patent(s) may be granted an atent(s)"). It at the expense of said ASSIGNEE, to do all acts and enforcing protection for said invention, exters Patent(s), in any interference, reissue, a may arise or be declared in relation to same, such declarations, taking all rightful oaths, providing | | | |
| IN WITNESS WHEREOF, the undersigned inve (Typed Name & Signature of Inventor(s)) | entor(s) has (have) affixed his/her/their s (Date) | ignature(s). (Typed Name & Signature of Witness(es)) | | | |
| 1) Hirotomo Izumi Hirotomo IZUMI | Nov. 11. 2002 | Yasuko Joya Jasuko SOGA | | | |
| 2) <u>Takashi Ishiwada</u> Takashi ISHIWADA | Nov. 26, 2002 | Yasuko Soga | | | |
| 3) <u>Nobashi Mitamura</u> Nobushi MITAMURA | 160, 11 2002 | Yasuko Soga Yasuko SOGA | | | |
| 4) | | | | | |
| 5) | | | | | |

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RECORDED: 01/27/2003

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