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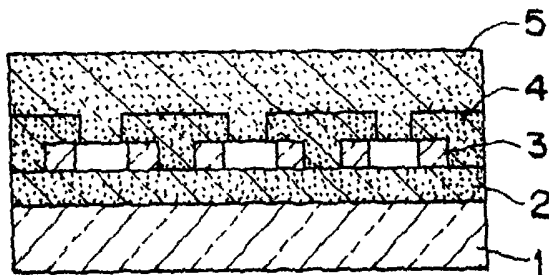
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- (74) Agents: **ISHII, Hisao** et al.; Aoyama & Partners, IMP Building, 3-7, Shiromi 1-chome, Chuo-ku, Osaka-shi, Osaka 540-0001 (JP).
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- (71) Applicant: **NICHIA CORPORATION** [JP/JP]; 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima 774-8601 (JP).
- (72) Inventors: **KOZAKI, Tokuya**; c/o Nichia Corporation, 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima 774-8601 (JP). **KIYOKU, Hiroyuki**; c/o Nichia Corporation, 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima 774-8601 (JP). **CHOCHO, Kazuyuki**; c/o Nichia Corporation, 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima 774-8601 (JP). **MAEGAWA, Hitoshi**; c/o Nichia Corporation, 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima 774-8601 (JP).
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(54) Title: NITRIDE SEMICONDUCTOR SUBSTRATE AND METHOD FOR MANUFACTURING THE SAME, AND NITRIDE SEMICONDUCTOR DEVICE USING NITRIDE SEMICONDUCTOR SUBSTRATE



semiconductor layer has a periodical T-shaped cross-section. Then, the protective layer is removed and the second nitride semiconductor layer is grown from the top and side surface of the first nitride semiconductor layer to cover the substrate.

(57) Abstract: A nitride semiconductor substrate including: (a) a supporting substrate; (b) a first nitride semiconductor layer having a periodical T-shaped cross-section, having grown from periodically arranged stripe-like, grid-like or island-like portions on the supporting substrate; and (c) a second nitride semiconductor substrate covering the supporting substrate, having grown from the top and side surfaces of the first nitride semiconductor layer, wherein a cavity is formed under the second nitride semiconductor layer. The first nitride semiconductor layer is laterally grown from the exposed portion of the substrate. The growth is stopped before the first nitride semiconductor layer covers the supporting substrate. Thus, the first nitride semiconductor layer has a periodical T-shaped cross-section. Then, the protective layer is removed and the second nitride semiconductor layer is grown from the top and side surface of the first nitride semiconductor layer to cover the substrate.

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

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X	WO 00 04615 A (FUJITSU LTD ;HORINO KAZUHIKO (JP); KURAMATA AKITO (JP)) 27 January 2000 (2000-01-27) figures 26,27 ---	4,14
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Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Claessen, L

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