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(54) MULTI-LAYER HIGHLY REFLECTIVE OHMIC CONTACTS FOR LIGHT-EMITTING SEMICONDUCTOR DEVICES

HOCHREFLEKTIERENDE OHMSCHE MEHRSCHICHTKONTAKTE FÜR LICHTEMITTIERENDE HALBLEITERBAUELEMENTE

CONTACTS OHMIQUES MULTICOUCHES DE HAUTE REFLEXION POUR DISPOSITIFS SEMICONDUCTEURS EMETTEURS DE LUMIERE

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(56) References cited:
EP-A- 0 051 172
EP-A- 0 926 744
WO-A-95/00974
DE-A- 4 113 969

- **PATENT ABSTRACTS OF JAPAN vol. 1999, no. 13, 30 November 1999 (1999-11-30) -& JP 11 220168 A (TOYODA GOSEI CO), 10 August 1999 (1999-08-10)**
- **PATENT ABSTRACTS OF JAPAN vol. 018, no. 270 (E-1552), 23 May 1994 (1994-05-23) -& JP 06 045651 A (SANYO ELECTRIC CO), 18 February 1994 (1994-02-18)**
- **MENSZ P ET AL: "InGaN/AlGaN violet LEDs with reflective p-contacts" ELECTRONICS LETTERS, 1997, vol. 33, pages 2066-2068, XP000734311 ISSN: 0013-5194 cited in the application**
- **PATENT ABSTRACTS OF JAPAN vol. 009, no. 255 (E-349), 12 October 1985 (1985-10-12) & JP 60 102733 A (OKI DENKI KOGYO KK), 6 June 1985 (1985-06-06)**

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