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(54) **WAVELENGTH SWEEPABLE LASER SOURCE**  
**WELLENLÄNGEN-SWEEPFÄHIGE LASERQUELLE**  
**SOURCE LASER À BALAYAGE DE LONGUEUR D'ONDE**

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(56) References cited:  
**US-A1- 2005 281 308 US-A1- 2006 022 213**  
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- **DALY A ET AL: "10 Gbit/s transmission over 50 km of SMF using MEMS tunable VCSEL", ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 48, no. 7, 29 March 2012 (2012-03-29) , pages 394-396, XP011441281, ISSN: 0013-5194, DOI: 10.1049/EL.2012.0405**
- **HUBER D, CORREDOURA P ET AL: "Reducing Brownian Motion in an Electrostatically Tunable MEMS Laser", JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, IEEE SERVICE CENTER, US, vol. 13, no. 5, 1 October 2004 (2004-10-01), pages 732-736, XP011119852, ISSN: 1057-7157, DOI: 10.1109/JMEMS.2004.836290**
- **IL-SUG CHUNG ET AL: "Broadband MEMS-Tunable High-Index-Contrast Subwavelength Grating Long-Wavelength VCSEL", IEEE JOURNAL OF QUANTUM ELECTRONICS, IEEE SERVICE CENTER, PISCATAWAY, NJ, USA, vol. 46, no. 9, 1 September 2010 (2010-09-01), pages 1245-1253, XP011314283, ISSN: 0018-9197**

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- COLE G D ET AL: "Short-wavelength MEMS-tunable VCSELs", OPTICS EXPRESS OPTICAL SOCIETY OF AMERICA USA, vol. 16, no. 20, 2008, pages 16093-16103, XP002690863, ISSN: 1094-4087 cited in the application
- VAIL E C ET AL: "HIGH PERFORMANCE AND NOVEL EFFECTS OF MICROMECHANICAL TUNABLE VERTICAL-CAVITY LASERS", IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 3, no. 2, 1 April 1997 (1997-04-01), pages 691-697, XP000735970, ISSN: 1077-260X, DOI: 10.1109/2944.605722