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(54) **USING LASERS TO REDUCE REFLECTION OF TRANSPARENT SOLIDS, COATINGS AND DEVICES EMPLOYING TRANSPARENT SOLIDS**

VERWENDUNG VON LASERN ZUR VERMINDERUNG DER REFLEXION VON TRANSPARENTEN FESTSTOFFEN, BESCHICHTUNGEN UND VORRICHTUNGEN MIT TRANSPARENTEN FESTSTOFFEN

UTILISATION DE LASERS POUR RÉDUIRE LA RÉFLEXION DE SOLIDES TRANSPARENTS, REVÊTEMENTS ET DISPOSITIFS UTILISANT DES SOLIDES TRANSPARENTS

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(56) References cited:
WO-A1-2013/030343 WO-A1-2016/016670
CN-A- 106 526 716 US-A1- 2012 328 905

- **MENG GE ET AL: "Dual-scale nanoripple/nanoparticle-covered microspikes on silicon by femtosecond double pulse train irradiation in water", APPLIED SURFACE SCIENCE, ELSEVIER, AMSTERDAM, NL, vol. 410, 9 March 2017 (2017-03-09), pages 22-28, XP029983069, ISSN: 0169-4332, DOI: 10.1016/J.APSUSC.2017.03.079**

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- DIEZ M ET AL: "Selective laser ablation of thin dielectrics on solar cells", 26TH EUROPEAN INTERNATIONAL CONFERENCE ON PHOTOVOLTAIC SOLAR ENERGY 5-9 SEPT. 2011 HAMBURG, GERMANY, , 1 January 2011 (2011-01-01), pages 1080-1088, XP009508705, DOI: 10.4229/26THEUPVSEC2011-2CO.15.2 ISBN: 978-3-936338-27-0 Retrieved from the Internet:
URL: <https://www.eupvsec-proceedings.com/proceedings/checkout.html?paper=13212>
- BRAHM A ET AL: "Laser-generated broadband antireflection structures for freeform silicon lenses at terahertz frequencies", APPLIED OPTICS, OPTICAL SOCIETY OF AMERICA, WASHINGTON, DC; US, vol. 53, no. 13, 1 May 2014 (2014-05-01), pages 2886-2891, XP001589720, ISSN: 0003-6935, DOI: 10.1364/AO.53.002886 [retrieved on 2014-04-29]
- Kyoo-Chul Park ET AL: "Nanotextured Silica Surfaces with Robust Superhydrophobicity and Omnidirectional Broadband Supertransmissivity", ACS Nano, vol. 6, no. 5, 22 May 2012 (2012-05-22), pages 3789-3799, XP055088684, ISSN: 1936-0851, DOI: 10.1021/nn301112t