

Title (en)
DECORATIVE ELEMENT

Title (de)
DEKORATIVES ELEMENT

Title (fr)
ÉLÉMENT DÉCORATIF

Publication
EP 3815566 A1 20210505 (EN)

Application
EP 19206351 A 20191030

Priority
EP 19206351 A 20191030

Abstract (en)
A decorative element (400) comprises a faceted (110, 140) decorative body (100) with a flat back surface (150), a microstructure on the flat back surface of the decorative body, the microstructure (200) comprising a faceted region, and an at least partially reflective layer (240) on at least a portion of the faceted region of the microstructure. The combination of the faceted region and the at least partially reflective layer is configured to reflect light incident on the at least partially reflective layer through the decorative body in multiple directions. Methods for manufacturing a decorative element and a faceted microstructure for improving the appearance of a flat-back decorative body are described.

IPC 8 full level
A44C 17/00 (2006.01); **B24B 9/16** (2006.01); **B28D 5/00** (2006.01)

CPC (source: EP)
A44C 17/001 (2013.01); **B24B 9/163** (2013.01)

Citation (applicant)
• WO 2015027252 A1 20150305 - SWAROWSKI KG D [AT]
• EP 1725502 A1 20061129 - SWAROVSKI & CO [AT]
• EP 0265149 A2 19880427 - PLESSEY OVERSEAS [GB]
• MOSES ET AL., GEMS & GEMOLOGY, vol. 40, no. 3, 2004, Retrieved from the Internet <URL:https://www.qia.edu/qems-qemoloqv/fall-2004-grading-cut-quality-brilliant-diamond-moses>
• J. SASIAN ET AL.: "Optical Engineering", vol. 46, 2007, AMERICAN GEMOLOGICAL SOCIETY, article "Evaluation of brilliance, fire, and scintillation in round brilliant gemstones", pages: 093604
• P. YANTZER ET AL., FOUNDATION, RESEARCH RESULTS AND APPLICATION OF THE NEW AGS CUT GRADING SYSTEM, Retrieved from the Internet <URL:https://cdn.ymaws.com/www.americangemsociety.or/resource/resmgr/docs/AGSLab/AGS-Cut-System.pdf>
• X. D. HUANG: "Reversal imprinting by transferring polymer from mold to substrate", J. VAC. SCI. TECHNOL., B, vol. 20, 2002, pages 2078

Citation (search report)
• [A] EP 3141142 A1 20170315 - SWAROVSKI D KG [AT]
• [A] WO 2007067696 A1 20070614 - CALIFORNIA INST OF TECHN [US], et al
• [A] US 2511510 A 19500613 - MUKAI RALPH S
• [A] DE 8701681 U1 19870709

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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