

Title (en)

OPTICALLY ASCERTAINING THE SUN PROTECTION FACTOR OF SUNSCREENS OR OTHER RADIATION PROTECTION AGENTS

Title (de)

OPTISCHE ERMITTLUNG DER SCHUTZFAKTOREN VON SONNENSCHUTZ- BZW. ANDEREN STRAHLUNGSSCHUTZMITTELN

Title (fr)

DÉTERMINATION OPTIQUE DES FACTEURS DE PROTECTION DE MOYENS DE PROTECTION SOLAIRE OU D'AUTRES MOYENS DE PROTECTION CONTRE LES RAYONNEMENTS

Publication

EP 3365641 A1 20180829 (DE)

Application

EP 16797454 A 20161020

Priority

- DE 102015013558 A 20151020
- DE 2016100491 W 20161020

Abstract (en)

[origin: WO2017067545A1] The invention is used to ascertain a sun protection factor for light, for example for cosmetics and sunscreens for which a sun protection factor (SPF) is specified. Two measurements of the light backscattering on the skin surface are carried out in vivo or in vitro or on skin models (animal skin models or artificial skin models) before and after applying the radiation protection means onto the skin, and the sun protection factor is ascertained therefrom. In contrast to standard methods used until now, the distance between the lighting surface and the detection surface on the skin is ascertained for the irradiation path of the measurement method. The skin lighting dose used during the measurement lies below harmful limits. The sun protection factor can be ascertained according to previous standards or for additional wavelengths or wavelength ranges (e.g. UVA, VIS, NIR, IR).

IPC 8 full level

A61B 5/00 (2006.01); **G01J 1/42** (2006.01); **G01N 21/33** (2006.01); **G01N 21/47** (2006.01); **G01N 21/49** (2006.01)

CPC (source: EP US)

A61B 5/0075 (2013.01 - EP US); **A61B 5/0077** (2013.01 - US); **A61B 5/0082** (2013.01 - US); **A61B 5/441** (2013.01 - EP US); **G01N 21/33** (2013.01 - EP US); **G01N 21/474** (2013.01 - EP US); **G01N 21/49** (2013.01 - EP US); **G01N 2021/4742** (2013.01 - EP US)

Citation (search report)

See references of WO 2017067545A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2017067545 A1 20170427; CN 109073456 A 20181221; DE 112016004783 A5 20180927; EP 3365641 A1 20180829; JP 2018533013 A 20181108; US 11137347 B2 20211005; US 2018321139 A1 20181108

DOCDB simple family (application)

DE 2016100491 W 20161020; CN 201680074726 A 20161020; DE 112016004783 T 20161020; EP 16797454 A 20161020; JP 2018521278 A 20161020; US 201615769892 A 20161020