

Title (en)
FILTER SUBSTRATE FOR FILTERING AND OPTICALLY CHARACTERIZING MICROPARTICLES, METHOD FOR PRODUCING THE FILTER SUBSTRATE, AND USE OF THE FILTER SUBSTRATE

Title (de)
FILTERSUBSTRAT ZUR FILTERUNG UND OPTISCHEN CHARAKTERISIERUNG VON MIKROPARTIKELN. VERFAHREN ZUR HERSTELLUNG DES FILTERSUBSTRATS UND VERWENDUNG DES FILTERSUBSTRATS

Title (fr)
SUBSTRAT FILTRANT POUR FILTRER ET EFFECTUER LA CARACTÉRISATION OPTIQUE DE MICROPARTICULES PROCÉDÉ DE FABRICATION DUDIT SUBSTRAT FILTRANT ET UTILISATION DU SUBSTRAT FILTRANT

Publication
EP 3775835 A1 20210217 (DE)

Application
EP 19720782 A 20190411

Priority
• DE 102018205529 A 20180412
• EP 2019059275 W 20190411

Abstract (en)
[origin: WO2019197542A1] The present invention relates to a filter substrate for filtering and optically characterizing microparticles. The filter substrate comprises a wafer having a thickness of at least 100 pm and a transmittance of at least 10% for radiation in the wavelength range of 2500 nm to 15000 nm. Furthermore, the surface of the front side and/or the surface of the rear side of the wafer is completely or partially provided with an antireflective layer, which prevents the optical reflection of radiation in the wavelength range of 200 nm to 10000 nm. Moreover, the wafer has, at least in some regions, filter holes having a diameter of 1 pm to 5 mm. With the filter substrate according to the invention, microparticles can be filtered and the microparticles on the filter substrate can be subsequently optically characterized with very high measurement quality. The present invention further relates to a method for producing the filter substrate according to the invention and to the use of the filter substrate according to the invention.

IPC 8 full level
G01N 1/40 (2006.01); **G01N 15/00** (2006.01); **G01N 15/06** (2006.01); **G01N 21/35** (2014.01); **G01N 21/65** (2006.01)

CPC (source: EP KR US)
B23K 26/382 (2015.10 - US); **G01N 1/4077** (2013.01 - EP KR US); **G01N 15/0612** (2013.01 - US); **G01N 15/0618** (2013.01 - EP); **G01N 15/0625** (2013.01 - EP KR); **G01N 2001/4088** (2013.01 - EP KR US); **G01N 2015/0053** (2013.01 - EP KR)

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 2019197542 A1 20191017; CN 112041656 A 20201204; DE 102018205529 A1 20191017; EP 3775835 A1 20210217; KR 20210015783 A 20210210; US 11879823 B2 20240123; US 2021364405 A1 20211125

DOCDB simple family (application)
EP 2019059275 W 20190411; CN 201980025363 A 20190411; DE 102018205529 A 20180412; EP 19720782 A 20190411; KR 20207032743 A 20190411; US 201917045976 A 20190411