

Title (en)
METAL MASK MATERIAL AND PRODUCTION METHOD THEREFOR

Title (de)
METALLMASKENMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
MATÉRIAU POUR MASQUE MÉTALLIQUE, ET PROCÉDÉ DE FABRICATION DE CELUI-CI

Publication
EP 3508604 A4 20200101 (EN)

Application
EP 17846645 A 20170831

Priority
• JP 2016169880 A 20160831
• JP 2017031348 W 20170831

Abstract (en)
[origin: EP3508604A1] Provided are: a metal mask material the shape change of which after etching is suppressed and which has more excellent etching properties; and a production method for the metal mask material. The metal mask material has a surface roughness in the rolling direction and a surface roughness in a direction perpendicular to the rolling direction, which satisfy $0.05\text{ }\mu\text{m}\leq\text{Ra}\leq 0.25\text{ }\mu\text{m}$ and $\text{Rz}\leq 1.5\text{ }\mu\text{m}$, and has a skewness Rsk of less than 0. When a sample having a length of 150 mm and a width of 30 mm is cut out of the metal mask material and the thickness of the sample is reduced by 60% by etching from one side of the sample, the amount of warpage of the sample is 15 mm or less. The metal mask material has a thickness of not less than 0.01 mm but less than 0.10 mm.

IPC 8 full level
C22C 38/08 (2006.01); **B21B 3/02** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **B21B 1/22** (2006.01)

CPC (source: EP KR)
C21D 8/0236 (2013.01 - EP); **C21D 8/0436** (2013.01 - KR); **C21D 9/46** (2013.01 - KR); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/08** (2013.01 - EP KR); **C21D 9/46** (2013.01 - EP)

Citation (search report)
• [A] JP 2016135505 A 20160728 - HITACHI METALS LTD
• [A] JP 2001038403 A 20010213 - NISSHIN STEEL CO LTD
• [A] JP 2001179305 A 20010703 - TOSHIBA CORP
• See references of WO 2018043641A1

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

DOCDB simple family (publication)
EP 3508604 A1 20190710; **EP 3508604 A4 20200101**; **EP 3508604 B1 20201209**; CN 109642289 A 20190416; CN 109642289 B 20210601; JP 6807038 B2 20210106; JP WO2018043641 A1 20190624; KR 102200854 B1 20210111; KR 102200854 B9 20220720; KR 20190034263 A 20190401; WO 2018043641 A1 20180308

DOCDB simple family (application)
EP 17846645 A 20170831; CN 201780052358 A 20170831; JP 2017031348 W 20170831; JP 2018537394 A 20170831; KR 20197005475 A 20170831