

Title (en)

TITANIUM NICKEL NIOBIUM ALLOY BARRIER FOR LOW-EMISSIVITY COATINGS

Title (de)

BARRIERE AUS TITAN-NICKEL-NIOB-LEGIERUNG FÜR EMISSIONSARME BESCHICHTUNGEN

Title (fr)

BARRIÈRE EN ALLIAGE DE TITANE, DE NICKEL ET DE NIOBIUM POUR REVÊTEMENTS À FAIBLE ÉMISSIVITÉ

Publication

EP 3271169 A1 20180124 (EN)

Application

EP 16716955 A 20160315

Priority

- US 201514661958 A 20150318
- US 2016022416 W 20160315

Abstract (en)

[origin: WO2016149239A1] A method for making low emissivity panels, including control the composition of a barrier layer formed on a thin conductive silver layer. The barrier structure can include a ternary alloy of nickel, titanium, and niobium, which showed improvements in overall performance than those from binary barrier results. The percentage of nickel can be between 5 and 15 wt%. The percentage of titanium can be between 30 and 50 wt%. The percentage of niobium can be between 40 and 60 wt%.

IPC 8 full level

B32B 15/08 (2006.01); **C03C 17/34** (2006.01); **C03C 17/36** (2006.01); **C23C 14/00** (2006.01); **C23C 14/08** (2006.01); **C23C 14/34** (2006.01); **G02B 5/08** (2006.01)

CPC (source: EP KR RU)

B32B 15/08 (2013.01 - EP); **C03C 17/36** (2013.01 - EP RU); **C03C 17/361** (2013.01 - RU); **C03C 17/3613** (2013.01 - RU); **C03C 17/3639** (2013.01 - RU); **C03C 17/3642** (2013.01 - KR RU); **C03C 17/3644** (2013.01 - EP KR RU); **C03C 17/3652** (2013.01 - EP KR); **C03C 17/366** (2013.01 - EP KR); **C03C 17/3681** (2013.01 - RU); **C22C 27/02** (2013.01 - KR); **C23C 14/0036** (2013.01 - KR); **C23C 14/08** (2013.01 - KR); **C23C 14/185** (2013.01 - EP KR); **G02B 5/208** (2013.01 - EP); **G02B 5/285** (2013.01 - EP)

Citation (search report)

See references of WO 2016149239A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016149239 A1 20160922; BR 112017019742 A2 20180529; CN 107645988 A 20180130; EP 3271169 A1 20180124; JP 2018514499 A 20180607; JP 6526255 B2 20190605; KR 20180021675 A 20180305; MX 2017011943 A 20180528; RU 2017135082 A 20190408; RU 2017135082 A3 20190906; RU 2721607 C2 20200521

DOCDB simple family (application)

US 2016022416 W 20160315; BR 112017019742 A 20160315; CN 201680028471 A 20160315; EP 16716955 A 20160315; JP 2017568006 A 20160315; KR 20177029905 A 20160315; MX 2017011943 A 20160315; RU 2017135082 A 20160315