

Title (en)  
SAPPHIRE THIN FILM COATED SUBSTRATE

Title (de)  
MIT SAPHIRDÜNNSSCHICHT ÜBERZOGENES SUBSTRAT

Title (fr)  
SUBSTRAT REVÊTU D'UN FILM MINCE DE SAPHIR

Publication  
**EP 3523460 A4 20200624 (EN)**

Application  
**EP 17857828 A 20170927**

Priority  
• US 201662405215 P 20161006  
• US 201662409352 P 20161017  
• US 201715597170 A 20170517  
• CN 2017103698 W 20170927

Abstract (en)  
[origin: WO2018064947A1] An anti-reflective coating comprising a topmost anti-reflective material layer comprising of sapphire or Al<sub>2</sub>O<sub>3</sub>, the one or more middle anti-reflective material layers, and a bottommost anti-reflective material layer deposited on top of the substrate, wherein the topmost anti-reflective material layer, the one or more middle anti-reflective material layers, and the bottommost anti-reflective material layer have alternatively higher and lower refractive indices in respect with each other. The anti-reflective coating on a substrate can form high anti-scratching.

IPC 8 full level  
**C23C 14/08** (2006.01); **C03C 1/00** (2006.01); **C03C 17/245** (2006.01); **C03C 17/34** (2006.01); **C03C 17/36** (2006.01); **C08J 7/06** (2006.01); **C23C 14/00** (2006.01); **C23C 14/02** (2006.01); **C23C 14/30** (2006.01); **C23C 14/34** (2006.01); **C23C 14/58** (2006.01); **C23C 28/04** (2006.01); **G02B 1/113** (2015.01); **G02B 1/115** (2015.01); **G02B 1/14** (2015.01)

CPC (source: EP KR)  
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Citation (search report)  
• [XY] JP 2003149406 A 20030521 - TOPCON CORP  
• [X] WO 2015137950 A1 20150917 - UNIV CENTRAL FLORIDA RES FOUND [US]  
• [Y] CN 204795193 U 20151118 - SHENZHEN XINTAI COMM CO LTD  
• [Y] JP 2004085231 A 20040318 - CITIZEN WATCH CO LTD  
• [A] WO 2015081987 A1 20150611 - VERTU CORP LTD [GB]  
• [A] WO 2016037590 A1 20160317 - UNIV HONG KONG BAPTIST [CN]  
• [A] US 5885712 A 19990323 - OTANI MINORU [JP], et al  
• See references of WO 2018064947A1

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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