

US2010038115A1 Electrodeposited copper foil, its manufacturing method, surface-treated electrodeposited copper foil using the electrodeposited copper foil, and copper-clad laminate and printed wiring board using the surface-treated electrodeposited copper foil

Applicants: MITSUI MINING & SMELTING CO [JP]

Inventors: MATSUDA MITSUYOSHI [JP], SAKAI HISAO [JP], TOMONAGA SAKITO [JP], DOBASHI MAKOTO [JP]

Classifications:

IPC **C25D1/04; C25D7/00; H05K1/00; H05K1/09;**

CPC **C25D1/00 (KR); C25D1/04 (EP,KR,US); C25D3/38 (EP,US); C25D5/48 (US); H05K1/09 (EP,KR,US);**
C25D5/48 (EP); H05K1/0393 (EP,US); H05K2201/0355 (EP,US); Y10T428/12451 (EP,US);
Y10T428/12472 (EP,US); Y10T428/12882 (EP,US); Y10T428/12903 (EP,US); Y10T428/12993 (EP,US);
Y10T428/24917 (EP,US);

Priorities: JP2005104540A 2005-03-31; JP2006009321A 2006-01-17; JP2006306920W 2006-03-31

Application: US91005006A 2006-03-31

Publication: US2010038115A1 2010-02-18

Published as: **CN101146933A; CN101146933B; CN101851769A; CN101851769B; EP1876266A1; EP1876266A4;**
EP1876266B1; KR100941219B1; KR100975491B1; KR20070107803A; KR20090110953A; TW200641186A; TWI285686B;
US2010038115A1; US8722199B2; WO2006106956A1

Electrodeposited copper foil, its manufacturing method, surface-treated electrodeposited copper foil using the electrodeposited copper foil, and copper-clad laminate and printed wiring board using the surface-treated electrodeposited copper foil

Abstract

It is an object of the present invention to provide an electrodeposited copper foil which has a lower profile and a higher gloss than low-profile electrodeposited copper foil conventionally supplied in markets. For achieving this object, the present invention employs an electrodeposited copper foil which has a super low profile, the surface roughness (Rzjis) of the deposit side of lower than 1.0-micron meter, and the gloss [Gs(60-deg.)] thereof of not lower than 400 irrespective to its thickness. The present invention also provides a manufacturing method of an electrodeposited copper foil obtained by electrodeposition using a sulfuric acid base copper electrolytic solution obtained by adding 3-mercapto-1-propanesulfonic acid and/or bis(3-sulfopropyl)disulfide, a quaternary ammonium salt polymer having a cyclic structure, and chlorine.