

Title (en)

NICKEL POWDER, METHOD FOR PRODUCING SAME, AND POLYMER PTC DEVICE USING SUCH NICKEL POWDER

Title (de)

NICKELPULVER, VERFAHREN ZU DESSEN HERSTELLUNG UND SOLCH EIN NICKELPULVER VERWENDENDE POLYMER-PTC-VORRICHTUNG

Title (fr)

POUDRE DE NICKEL, SON PROCEDE DE PRODUCTION ET DISPOSITIF DE POLYMER PTC UTILISANT UNE TELLE POUDRE DE NICKEL

Publication

EP 1974840 A4 20111109 (EN)

Application

EP 06833524 A 20061128

Priority

- JP 2006323720 W 20061128
- JP 2005344631 A 20051129

Abstract (en)

[origin: EP1974840A1] There is provided a nickel powder which is inexpensive, has low electrical resistance when kneaded with a resin, has good weatherability, and can be used as an electrically conductive particles which are used as electrically conductive fillers for an electrically conductive paste. The nickel powder contains 1 - 20 % by mass of cobalt and the balance which comprises nickel and unavoidable impurities and which is formed of secondary particles of aggregated primary particles, which powder is characterized in that the powder has an average primary particle diameter being in 1.0 - 3.0 μm , a ratio \bar{A}/d 1 of a standard deviation \bar{A} of a primary particle diameter to the average primary particle diameter d 1 being 0.4 or less, an average secondary particle diameter being 5-60 μm , a tap density being 1.0 - 3.5 g/mL, and a specific surface area being 2.0 m²/g or less.

IPC 8 full level

B22F 1/00 (2022.01); **B22F 1/052** (2022.01); **B22F 9/24** (2006.01); **C22C 19/03** (2006.01); **H01B 1/22** (2006.01); **H01B 5/00** (2006.01); **H01C 7/02** (2006.01)

CPC (source: EP KR US)

B22F 1/00 (2013.01 - EP KR US); **B22F 1/052** (2022.01 - EP KR US); **B22F 9/24** (2013.01 - EP KR); **H01B 1/22** (2013.01 - EP KR); **H01B 5/00** (2013.01 - KR); **H01C 7/027** (2013.01 - EP US); **H01C 17/06526** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP)

Citation (search report)

- [A] JP 2005240164 A 20050908 - SUMITOMO METAL MINING CO
- [A] US 2005072270 A1 20050407 - KATO TOSHIHIRO [JP], et al
- [E] EP 1768135 A1 20070328 - TYCO ELECTRONICS RAYCHEM KK [JP]
- See references of WO 2007063851A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1974840 A1 20081001; **EP 1974840 A4 20111109**; CN 101316673 A 20081203; CN 101316673 B 20111109; JP 2007146251 A 20070614; JP 4942333 B2 20120530; KR 101356377 B1 20140127; KR 20080072081 A 20080805; TW 200734086 A 20070916; TW I402116 B 20130721; WO 2007063851 A1 20070607

DOCDB simple family (application)

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