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(81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW。

(54) Title: COMPOUND DISPERSANT AND PREPARATION METHOD, AND MIXED ELECTROPLATING SOLUTION AND PREPARATION METHOD

(54) 发明名称: 复配型分散剂及制备方法、混合电镀液及制备方法

(57) Abstract: The present invention relates to the technical field of materials, and in particular, to a compound dispersant, which is composed of distilled water, a nonionic surfactant, and a wetting agent; the nonionic surfactant is a Tween compound, and the wetting agent comprises a hydrocarbyl sulfate compound and a hydrocarbyl sulfonate compound. The compound dispersant can effectively block or slow down the agglomeration of graphene in a dispersion. The present invention also relates to a preparation method for a compound dispersant. The preparation method is simple to operate, and the prepared compound dispersant can effectively block or slow down the agglomeration of graphene in a dispersion. The present invention also relates to a mixed electroplating solution comprising the compound dispersant. The graphene in the mixed electroplating solution is dispersed evenly and stably. The present invention also relates to a preparation method for a mixed electroplating solution. The preparation method is simple to operate, and the graphene in the prepared mixed electroplating solution is dispersed evenly and stably.

(57) 摘要: 本发明涉及材料技术领域, 具体涉及一种复配型分散剂, 其由蒸馏水、非离子型表面活性剂和润湿剂组成; 所述非离子型表面活性剂为吐温类化合物, 润湿剂包括烷基硫酸酯盐化合物和烷基磺酸盐化合物; 所述复配型分散剂, 其能有效阻断或减缓分散液中石墨烯的团聚。本发明还涉及一种复配型分散剂制备方法, 其操作简单, 制备的复配型分散剂能有效阻断或减缓分散液中石墨烯的团聚。本发明还涉及一种包括所述复配型分散剂的混合电镀液, 其石墨烯分散均匀、稳定。本发明还涉及一种混合电镀液制备方法, 其操作简单, 制备的混合电镀液中, 石墨烯分散均匀、稳定。

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