

# (12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织  
国际局



(43) 国际公布日  
2011 年 11 月 24 日 (24.11.2011)

PCT

(10) 国际公布号  
WO 2011/143810 A1

(51) 国际专利分类号:  
H04R 17/00 (2006.01)

(21) 国际申请号: PCT/CN2010/072898

(22) 国际申请日: 2010 年 5 月 18 日 (18.05.2010)

(25) 申请语言: 中文

(26) 公布语言: 中文

(71) 申请人 (对除美国外的所有指定国): 深圳市轻松科技股份有限公司 (SHENZHEN BREO TECHNOLOGY CO., LTD) [CN/CN]; 中国广东省深圳市罗湖区深南东路 5033 号金山大厦 2202 室, Guangdong 518008 (CN)。

(72) 发明人: 及

(75) 发明人/申请人 (仅对美国): 马学军 (MA, Xuejun) [CN/CN]; 中国广东省深圳市罗湖区深南东路 5033 号金山大厦 2202 室, Guangdong 518008 (CN)。

(74) 代理人: 深圳鼎合诚知识产权代理有限公司 (DHC LAW OFFICE); 中国广东省深圳市福田区金田路与福华路交汇处现代商务大厦 2201, Guangdong 518048 (CN)。

(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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW。

(84) 指定国 (除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)。

本国际公布:

— 包括国际检索报告(条约第 21 条(3))。

[见续页]

(54) Title: VIBRATION TRANSDUCER AND SOMATOSENSORY VIBRATION APPARATUS WITH THE VIBRATION TRANSDUCER

(54) 发明名称: 振动换能器及具有该振动换能器的体感振动装置

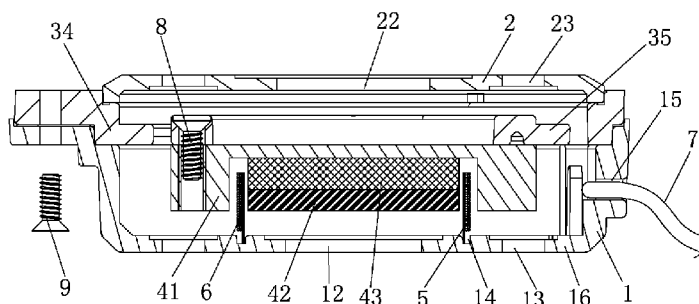


图2 / Fig. 2

(57) Abstract: A vibration transducer and a somatosensory vibration apparatus with the vibration transducer are disclosed. The vibration transducer includes a main housing, an upper cover, a supporter, a magnet yoke structure, a coil frame and a coil, wherein the main housing, the upper cover and the supporter are fixed and connected together, the supporter is provided with a spring suspension, the magnet yoke structure is suspended on the suspension, the coil frame is fixed on the main housing, the coil is placed on the coil frame, the coil frame is provided with a connection part made of heat-insulating materials, the coil frame is fixed to the main housing by the connection part, and at least one of the main housing and the upper cover is provided with a heat dissipating hole. By configuring the heat-insulating connection part and utilizing the air flow, heat is dissipated through the heat dissipating hole as much as possible with a high efficiency; because the heat of the coil is mainly dissipated by the air flow, the requirement for mounting the coil frame connection part to the main housing is reduced, the production art is simplified, and the production efficiency is improved.

(57) 摘要:

[见续页]

WO 2011/143810 A1