

(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



(10) 国际公布号
WO 2022/012376 A1

(43) 国际公布日
2022 年 1 月 20 日 (20.01.2022)

(51) 国际专利分类号:
H01Q 1/36 (2006.01)

(21) 国际申请号: PCT/CN2021/104734

(22) 国际申请日: 2021 年 7 月 6 日 (06.07.2021)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202010667889.4 2020 年 7 月 13 日 (13.07.2020) CN

(71) 申请人: 北京握奇数据股份有限公司 (BEIJING WATCHDATA CO., LTD.) [CN/CN]; 中国北京市顺义区空港 B 区后沙峪安庆大街 3 号李童齐, Beijing 101318 (CN)。

(72) 发明人: 龚学军 (GONG, Xuejun); 中国北京市顺义区空港 B 区后沙峪安庆大街 3 号李童齐, Beijing 101318 (CN)。

(74) 代理人: 北京天悦专利代理事务所 (普通合伙) (BEIJING TIANYUE GIP LAW FIRM); 中国北京市海淀区彩和坊路 8 号天创科技大厦 7 层 715-716 室田明, Beijing 100080 (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, 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, 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。

(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, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM,

(54) Title: HIGH-FREQUENCY DUAL-INDUCTION ANTENNA AND MANUFACTURING METHOD THEREFOR

(54) 发明名称: 一种高频双感应天线及其制作方法

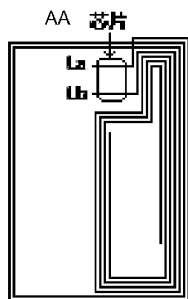


图 2

AA Chip

(57) Abstract: Disclosed are a high-frequency dual-induction antenna and a manufacturing method therefor. Said antenna comprises: a main high-frequency antenna and a secondary high-frequency antenna which are wound around each other but are not connected, wherein the main high-frequency antenna is a large coil antenna at the periphery, the secondary high-frequency antenna is a small coil antenna in the main high-frequency antenna, the main high-frequency antenna and the secondary high-frequency antenna are wound in the same direction when being wound from an outer ring to an inner ring, one end of the main high-frequency antenna is connected to a first non-connection signal contact of a chip, and one end of the secondary high-frequency antenna is connected to a second non-connection signal contact of the chip. The present invention uses a high frequency dual-induction coil antenna design, so that the radio frequency performance of a card is greatly improved, the card using the dual-induction antenna design greatly increases the usage range of a CPU card, and the reader/writer compatibility of the card is stronger; and when an SE chip with a poor radio frequency performance is used, the defect of the chip can be overcome by using the dual-induction antenna design, so as to ensure that the radio frequency performance of the whole card is improved, and make the usage experience of customers better.

(57) 摘要: 本发明公开了一种高频双感应天线及其制作方法, 天线包括: 相互缠绕但不连接的主高频天线和副高频天线, 其中, 主高频天线为外围的大线圈天线, 副高频天线为主高频天线内的小线圈天线, 主高频天线和副高频天线从外圈向里圈绕制时朝同一方向绕制, 主高频天线的一端与芯片的第一非接信号触点连接, 副高频天线的一端与芯片的第二非接信号触点连接。本发明采用双高频感应线圈天线设计, 大幅提升了卡片的射频性能; 采用双感应天线设计的卡片, 大大增加了 CPU 卡片的使用范围, 卡片的读写器兼容性更强; 在采用射频性能较差的 SE 芯片时, 采用双感天线设计可以克服芯片的弊端, 确保整体卡片的射频性能有所提升, 使客户的使用感受更好。

[见续页]

WO 2022/012376 A1

AZ, BY, KG, KZ, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, 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))。