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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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD,

(54) **Title:** PAYMENT CAPABILITY EXTENSION PROCESSING METHOD, APPARATUS AND DEVICE

(54) **发明名称:** 一种支付能力扩展处理方法、装置以及设备

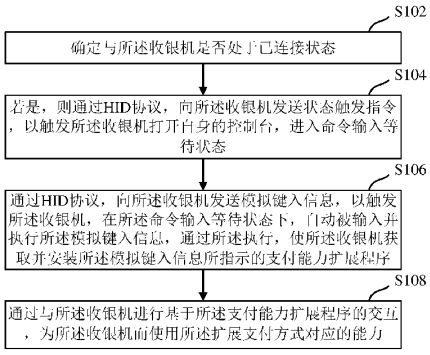

图 1

S102 Determine whether a cash register is in a connected state

S104 When the cash register is in a connected state, send a state trigger instruction to the cash register by means of an HID protocol, so as to trigger the cash register to open its own console and enter a command input waiting state

S106 Send simulated typing information to the cash register by means of the HID protocol, so as to trigger the cash register, such that the simulated typing information is automatically input into the cash register in the command input waiting state and the simulated typing information is executed, and by means of execution, the cash register is enabled to acquire and install a payment capability extension program indicated by the simulated typing information

S108 By means of interaction with the cash register on the basis of the payment capability extension program, apply to the cash register the capability corresponding to an extended payment mode

(57) **Abstract:** Disclosed in the present invention are a payment capability extension processing method, apparatus and device, which are applied to an external payment device configured for a cash register, wherein the external payment device provides at least one extended payment mode that the cash register itself does not have. The method comprises: determining whether a cash register is in a connected state; when the cash register is in a connected state, sending a state trigger instruction to the cash register by means of an HID protocol, so as to trigger the cash register to open its own console and enter a command input waiting state; sending simulated typing information to the cash register by means of the HID protocol, so as to trigger the cash register, such that the simulated typing information is automatically input into the cash register in the command input waiting state and the simulated typing information is executed, and by means of execution, the cash register is enabled to acquire and install a payment capability extension program indicated by the simulated typing information; and by means of interaction with the cash register on the basis of the payment capability extension program, applying to the cash register the capability corresponding to an extended payment mode.

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本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本发明公开了一种支付能力扩展处理方法、装置以及设备，应用于为收银机配置的外置支付设备，外置支付设备提供收银机本身不具有的至少一种扩展支付方式。方法包括：确定与收银机是否处于已连接状态；若是，则通过HID协议，向收银机发送状态触发指令，以触发收银机打开自身的控制台，进入命令输入等待状态；通过HID协议，向收银机发送模拟键入信息，以触发收银机，在命令输入等待状态下，自动被输入并执行模拟键入信息，通过执行，使收银机获取并安装模拟键入信息所指示的支付能力扩展程序；通过与收银机进行基于支付能力扩展程序的交互，为收银机而使用扩展支付方式对应的能力。