

(12) International Application Status Report

Received at International Bureau: 08 December 2019 (08.12.2019)

Information valid as of: 08 May 2020 (08.05.2020)

Report generated on: 25 September 2020 (25.09.2020)

(10) Publication number:

WO2020/111685

(43) Publication date:

04 June 2020 (04.06.2020)

(26) Publication language:

Korean (KO)

(21) Application Number:

PCT/KR2019/016223

(22) Filing Date:

25 November 2019 (25.11.2019)

(25) Filing language:

Korean (KO)

(31) Priority number(s):

10-2018-0147407 (KR)

(31) Priority date(s):

26 November 2018 (26.11.2018)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

H04M 1/725 (2006.01); *H01R 24/58* (2011.01); *H01R 24/60* (2011.01); *H01R 107/00* (2006.01)

(71) Applicant(s):

SAMSUNG ELECTRONICS CO., LTD. [KR/KR]; 129, Samsung-ro, Yeongtong-gu Suwon-si, Gyeonggi-do 16677 (KR) (*for all designated states*)

(72) Inventor(s):

LEE, Wonwook; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 (KR)
KIM, Bangmin; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 (KR)
PARK, Sanghyuk; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 (KR)
PARK, Changi; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 (KR)
SON, Junho; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 (KR)
YEON, Dongju; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 (KR)
HAM, Jonghee; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 (KR)

(74) Agent(s):

YOON & LEE INTERNATIONAL PATENT & LAW FIRM; 3rd Fl, Ace Highend Tower-5, 226, Gasan Digital 1-ro, Geumcheon-gu Seoul 08502 (KR)

(54) Title (EN): ELECTRONIC APPARATUS FOR SUPPORTING HIGH-SPEED CHARGING AND AUDIO SIGNAL TRANSMISSION/RECEPTION FUNCTIONS

(54) Title (FR): APPAREIL ÉLECTRONIQUE DESTINÉ À PRENDRE EN CHARGE DES FONCTIONS DE CHARGE À GRANDE VITESSE ET D'ÉMISSION/RÉCEPTION DE SIGNAL AUDIO

(54) Title (KO): 고속 충전 및 오디오 신호 송수신 기능을 지원하는 전자 장치

(57) Abstract:

(EN): An electronic apparatus according to various embodiments comprises: a receptacle including a plurality of GND pins, a first CC pin, and a second CC pin and to which a first USB-type plug is insertable; and at least one processor, wherein the at least one processor is configured to: determine whether an external apparatus is connected and the external apparatus supports high-speed charging, by using at least one of the first CC pin and the second CC pin; determine whether the external apparatus supports an audio signal output, by using at least one of the plurality of GND pins, when the external apparatus is determined to support the high-speed charging; and transmit and receive at least one of data or electricity to and from the external apparatus, on the basis of whether the external apparatus supports the high-speed charging and the audio signal output. In addition, other embodiments are possible.

(FR): L'invention concerne, selon divers modes de réalisation, un appareil électronique comprenant : un connecteur femelle comprenant une pluralité de broches GND, une première broche CC et une seconde broche CC et dans lequel une première fiche de type USB peut être insérée ; et au moins un processeur, ledit processeur étant configuré pour : déterminer si un appareil externe est connecté et si l'appareil externe prend en charge une charge à grande vitesse, en utilisant la première broche CC et/ou la seconde broche CC ; déterminer si l'appareil externe prend en charge une sortie de signal audio, en utilisant au moins une broche

de la pluralité de broches GND, lorsque l'appareil externe est déterminé comme prenant en charge la charge à grande vitesse ; et transmettre et recevoir des données et/ou de l'électricité vers et depuis l'appareil externe, suivant que l'appareil externe prend en charge ou non la charge à grande vitesse et la sortie de signal audio. En outre, d'autres modes de réalisation sont également possibles.

(KO): 다양한 실시예에 따른 전자 장치는 복수의 GND핀들, 제1CC핀, 및 제2CC핀을 포함하고, 제1USB 타입의 플러그가 삽입될 수 있는 리셉터클; 및 적어도 하나의 프로세서를 포함하고, 상기 적어도 하나의 프로세서는, 상기 제1CC핀 및 상기 제2CC핀 중 적어도 하나를 이용하여, 외부 장치가 연결되었는지 여부 및 상기 외부 장치가 고속 충전을 지원하는지 여부를 판단하고, 상기 외부 장치가 고속 충전을 지원하는 것으로 판단하면, 상기 복수의 GND핀들 중 적어도 하나를 이용하여, 상기 외부 장치가 오디오 신호 출력을 지원하는지 여부를 판단하고, 상기 외부 장치의 고속 충전 지원 여부 및 상기 오디오 신호 출력 지원 여부에 기반하여, 상기 외부 장치와 데이터 또는 전력 중 적어도 하나를 송수신하도록 설정될 수 있다. 그밖에 다른 실시예들이 가능하다.

International search report:

Received at International Bureau: 09 March 2020 (09.03.2020) [KR]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

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, JO, JP, KE, KG, KH, KN, KP, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : 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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM