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**Registro 1 de 1**


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**Patent Number(s):** EP2784656-A1; WO2014157885-A1; KR2014118663-A; US2014298268-A1; CN104077038-A; US2016042166-A1; IN201503039-P3

**Title:** Menu interface providing method for lock screen of smartphone, involves displaying level of menu interface on lock screen, and providing level with menu items based on direction of drag input

**Inventor Name(s):** PARK Y; KANG N; KIM Y; BAE J; SOHN J; SHIN E; LEE K; LEE H; JIN Y; KIM D; LEE W; KANG N W; KIM D H; PARK Y G; JIN Y K; LEE W H; CHEN Y; KWAK B; RYU J; LEE C; LIM Y

**Patent Assignee(s):** SAMSUNG ELECTRONICS CO LTD (SMSU-C); SAMSUNG ELECTRONICS CO LTD (SMSU-C); SAMSUNG ELECTRONICS CO LTD (SMSU-C); SAMSUNG ELECTRONICS CO LTD (SMSU-C)

**Derwent Primary Accession No.:** 2014-R75476

**Abstract:** NOVELTY - The method involves receiving a touch input on a lock screen. A level of a menu interface in response to the touch input is displayed on the lock screen. A level is provided with multiple menu items. Drag input in a direction of one of the menus is received. Another level of the menu interface is displayed on the lock screen. The latter level is provided with other menu items based on a direction of a drag input. User selection with respect to one of the latter menu items is received. A function corresponding to the latter menu item is performed.

USE - Method for providing a menu interface on a lock screen. Uses include but are not limited to a cellular phone, smartphone, laptop computer, tablet personal computer (PC), e-book terminal, digital broadcasting terminal, personal digital assistant (PDA), portable multimedia player (PMP), navigation device and an MPEG 1 audio layer 3 (MP3) player.

ADVANTAGE - The method enables increasing user accessibility to a specific function and allowing the user to unlock the lock screen through two drag inputs and double-tap input to allow the device to quickly perform a specific application or function. The method efficiently provides a menu on a small screen. The sub menu is displayed on an edge part, so that the user can select the layer sub menus by slightly moving a touch tool toward the edge part, thus displaying sub menu without necessarily moving the touch tool on the edge part. The method allows visually impaired persons to easily access a specific menu.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a menu interface providing device comprising a user input unit
- (2) a non-transitory computer-readable storage medium has a set of instructions to provide a menu interface on a lock screen.

DESCRIPTION OF DRAWING(S) - The drawing shows a flowchart illustrating a menu interface providing method for a lock screen.

Step for receiving user touch input (S210)

Step for displaying multiple menus (S220)

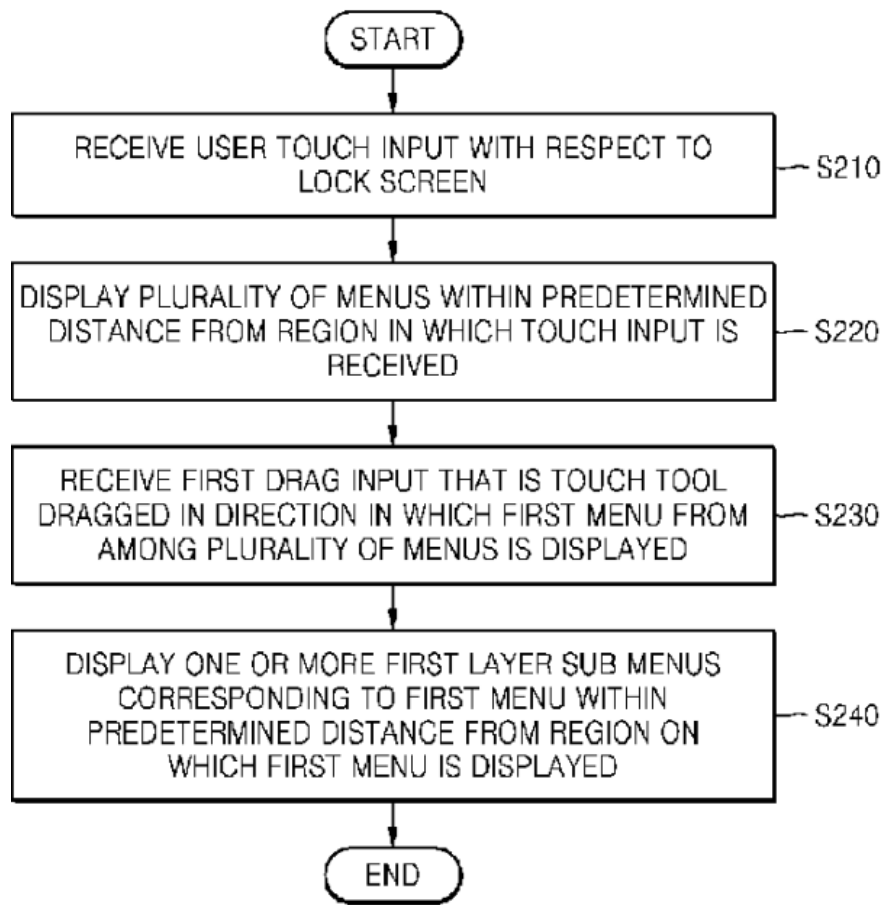
Step for receiving drag input (S230)

Step for displaying layer sub menus (S240)

**Technology Focus/Extension Abstract:** TECHNOLOGY FOCUS - INDUSTRIAL STANDARDS - The device adopts a short-range wireless communication unit comprising a Bluetooth communication unit, Bluetooth low energy (BLE) communication unit, wireless-fidelity (Wi-Fi) communication unit and a ZigBee communication unit.

**Drawing:**

**FIG. 2**



**Derwent Class Code(s):** T01 (Digital Computers)

**Derwent Manual Code(s):** T01-F04; T01-J10D; T01-J21; T01-S03

**IPC:** G06F-003/0482; G06F-003/0488; G06F-003/048; G06F-003/14; G06F-009/44; G06F-003/0484; G06F-003/0486; G06F-021/32

**Patent Details:**

| Patent Number   | Publ. Date  | Main IPC      | Week   | Page Count | Language |
|-----------------|-------------|---------------|--------|------------|----------|
| EP2784656-A1    | 01 Oct 2014 | G06F-003/0488 | 201466 | Pages: 64  | English  |
| WO2014157885-A1 | 02 Oct 2014 | G06F-003/048  | 201466 |            | English  |
| KR2014118663-A  | 08 Oct 2014 | G06F-003/048  | 201468 |            |          |
| US2014298268-A1 | 02 Oct 2014 | G06F-003/0482 | 201481 |            | English  |
| CN104077038-A   | 01 Oct 2014 | G06F-003/0482 | 201501 |            | Chinese  |
| US2016042166-A1 | 11 Feb 2016 | G06F-021/32   | 201612 |            | English  |
| IN201503039-P3  | 03 Jun 2016 | G06F-003/048  | 201670 |            | English  |

**Application Details and Date:**

|                 |            |             |
|-----------------|------------|-------------|
| EP2784656-A1    | EP161621   | 25 Mar 2014 |
| WO2014157885-A1 | WOKR002443 | 24 Mar 2014 |
| KR2014118663-A  | KR084934   | 18 Jul 2013 |
| US2014298268-A1 | US227522   | 27 Mar 2014 |
| CN104077038-A   | CN10118879 | 27 Mar 2014 |
| US2016042166-A1 | US882533   | 14 Oct 2015 |
| IN201503039-P3  | INMN03039  | 21 Oct 2015 |

**Further Application Details:**

|                 |                 |             |              |
|-----------------|-----------------|-------------|--------------|
| US2014298268-A1 | Provisional     | Application | US805632P    |
| US2016042166-A1 | Provisional     | Application | US805632P    |
| US2016042166-A1 | CIP of          | Application | US227522     |
| IN201503039-P3  | PCT application | Application | WOKR002443   |
| IN201503039-P3  | Based on        | Patent      | WO2014157885 |

**Priority Application Information and Date:**

|           |             |
|-----------|-------------|
| US805632P | 27 Mar 2013 |
| KR084934  | 18 Jul 2013 |

**Designated States:**

EP2784656-A1:

(Regional): AL; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HR; HU; IE; IS; IT; LI; LT; LU; LV; MC; MK; MT; NL; NO; PL; PT; RO; RS; SE; SI; SK; SM; TR; BA; ME  
WO2014157885-A1:  
(National): 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; DK; DM; DO; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; GT; HN; HR; HU; ID; IL; IN; IR; IS; JP; KE; KG; KN; KP; 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; 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

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|                 | US20150040024-A1                           |
| US8832597-B2    | SILICON GRAPHICS INC (SLCO) KURTENBACH G P |