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- (71) Applicant (for all designated States except US): P & TEL INC. [KR/KR]; 2, Mullae-dong 5-ga, Yeongdeungpo-gu, Seoul 150-958 (KR).
- (71) Applicant and
- (72) Inventor: LEE, HanSang [KR/KR]; 2007, SK Leaders View, 168, Dogok-dong, Gangnam-gu, Seoul 135-270 (KR).
- (74) Agent: PARK, HeeJin; 401, Miele Haus Building, 607-10, Yeoksam-dong, Gangnam-gu, Seoul 135-080 (KR).

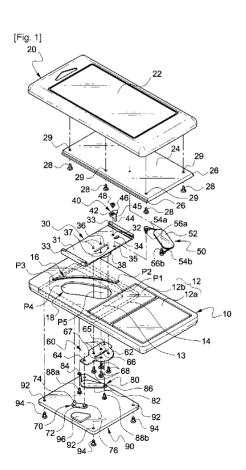
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(54) Title: COMBINED MECHANISM FOR SLIDING MOVEMENT AND ROTATING MOVEMENT AND A PORTABLE ELECTRONIC APPLIANCE EMPLOYING THE SAME



(57) Abstract: Disclosed is a combined sliding and rotation mechanism adapted to a device. When the sliding housing enters into a sliding operation mode from a closed condition, the constraint tip of the base swing link escapes from the constraint recess of the sliding housing, and the guide protrusion of the base swing link simultaneously moves from a boundary point between the horizontal recess and the slanted recess of the rotation guide recess to a terminal point of the horizontal recess so that the sliding housing is constrained and prevented from rotating. In addition, when the sliding housing enters into a rotation operation mode from the closed condition, the pad of the hinge base slides from a lower end of the rotation sliding opening to an upper end of the rotation sliding opening, the guide protrusion of the base swing link simultaneously slides from a lower end of the slanted recess to an upper end of the slanted recess and allows the sliding housing to rotate relative to the main housing, and the constraint tip of the base swing link remains inserted into the constraint recess of the sliding housing during the rotation process so that the sliding housing is not allowed to slide in the longitudinal direction of the main housing.

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#### A. CLASSIFICATION OF SUBJECT MATTER

## H04B 1/38(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

## FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 8 F16C, H04B, H04M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility models and applications for Utility Models since 1975

Japanese Utility models and applications for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKIPASS(KIPO internal) & keywords: "slide", "swing, rotate"

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1703704 A2(SAMSUNG ELECTRONICS CO.,LTD.) 20 SEPTEMBER 2006 abstract, claims 1, 23, figures 1, 4, 10, 13-14 and their related descriptions	1-20
A	EP 1531604 A2((SAMSUNG ELECTRONICS CO.,LTD.) 18 MAY 2005 abstract, claims 1, 13, 20, 37, 50, figure 1, 7-9	1-20
A	EP 1638295 A1(SAMSUNG ELECTRONICS CO.,LTD.) 22 MARCH 2006 abstract, figures 1, 15, 17 and their related descriptions	1-20
Α	JP 2007-071283 A(STROBERY COPORATION) 22 MARCH 2007 abstract, figures 1-4 and their related descriptions	1-20

Further documents are listed in the continuation of Box C.

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Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

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Authorized officer

KIM, Dong Sung

Telephone No. 82-42-481-8519



## INTERNATIONAL SEARCH REPORT

Information on patent family members

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	document n search report	Publication date	Patent family member(s)	Publication date
EP 17	703704 A2	20.09.2006	KR 10-2006-0100511 A CN 1835519 A EP 1703704 A3 US 2006-211460 A1	21.09.2006 20.09.2006 11.04.2007 21.09.2006
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