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- (71) Applicant (for all designated States except US): MI-CROSOFT CORPORATION [US/US]; Attn: Tuan Ngo, (tuanngo), 8/2287, LCA, International Patents Department, One Microsoft Way, Redmond, Washington 98052-6399 (US).
- (72) Inventors: KUNG, Yun-Chiang; c/o Microsoft Corporation, LCA, International Patents Department, One Microsoft Way, Redmond, Washington 98052-6399 (US). SHIH, Sheng-Yao; c/o Microsoft Corporation, LCA, International Patents Department, One Microsoft Way, Redmond, Washington 98052-6399 (US). LEE, Chin-Nan; c/o Microsoft Corporation, LCA, International Patents De-

partment, One Microsoft Way, Redmond, Washington 98052-6399 (US). HUANG, Yu Li; c/o Microsoft Corporation, LCA, International Patents Department, One Microsoft Way, Redmond, Washington 98052-6399 (US). LIU, Hsiang-Fu; c/o Microsoft Corporation, LCA, International Patents Department, One Microsoft Way, Redmond, Washington 98052-6399 (US).

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[Continued on next page]

### (54) Title: USER-SPECIFIED PHRASE INPUT LEARNING

EDITOR COMPONENT

110

PHRASE

OBJECT

OBJECT

108

SEPARATOR

OBJECT

106

INPUT

COMPONENT

112

SEPARATOR(S)

FIG. 1

(57) Abstract: Architecture that enables a user to perform manual word-breaking by phrase input. Phrase input is where the user inserts a phrase-key (or separator) as a delimiter that indicates to an editor application such as an IME (input method editor) the composition of a specific phrase when entering characters (e.g., Asian). The word-breaking is controlled by the user. The conversion quality is improved as the user knows the desired input and ambiguous cases are reduced. A phrase can be specified while the user is composing the characters. By selecting a phrase-key separator, the user can specify the composing characters before the characters are presented as a phrase. Moreover, the architecture includes a phrase prioritization mechanism wherein each phrase can be treated as a single entity and assigned a character identifier (ID), which is related to the sequence of a candidate list.





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 $TR),\,OAPI\,(BF,\,BJ,\,CF,\,CG,\,CI,\,CM,\,GA,\,GN,\,GQ,\,GW,\quad \textbf{Published}\colon$ ML, MR, NE, SN, TD, TG).

### **Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- the earlier application (Rule 4.17(iii))

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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International application No. **PCT/IB2009/007688** 

### A. CLASSIFICATION OF SUBJECT MATTER

G06F 17/24(2006.01)i, G06F 17/28(2006.01)i

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

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC8: G06F

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) eKOMPASS(KIPO internal) "phrase, edit, language, input"

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0212541 A1 (GARY KINDER) 13 NOVEMBER 2003 see abstract, paragraph[0164] - paragraph[0174], Figure 1.	1-15
A	US 2006/0129926 A1 (ALEXANDER H. MALEK et al.) 15 JUNE 2006 see abstract, paragraph[0047] - paragraph[0052], Figures 12-13.	1–15
A	US 2005/0102249 A1 (JOSEPH P. BIGUS et al.) 12 MAY 2005 see abstract, paragraph[0049] - paragraph[0062], Figures 1-3.	1–15

		Further documents are	listed in the	e continuation	of Box C.
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See patent family annex.

- \* Special categories of cited documents:
- 'A" document defining the general state of the art which is not considered to be of particular relevance
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- "&" document member of the same patent family

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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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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003-212541 A1	13.11.2003	US 07313513 B2	25.12.2007
US 2006-0129926 A1	15.06.2006	US 07143344 B2 US 2003-0237046 A1	28.11.2006 25.12.2003
JS 2005-102249 A1	12.05.2005	None	