



US007280097B2

(12) **United States Patent**
Chen et al.

(10) **Patent No.:** **US 7,280,097 B2**
(45) **Date of Patent:** **Oct. 9, 2007**

(54) **HUMAN INTERFACE INPUT
ACCELERATION SYSTEM**

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DE 29823417 6/1999

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **11/249,009**

(22) Filed: **Oct. 11, 2005**

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(65) **Prior Publication Data**

US 2007/0080931 A1 Apr. 12, 2007

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(51) **Int. Cl.**
G09G 5/00 (2006.01)

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(52) **U.S. Cl.** **345/156**; 345/169

(58) **Field of Classification Search** 345/156,
345/157, 163, 173, 168, 169
See application file for complete search history.

(57) **ABSTRACT**

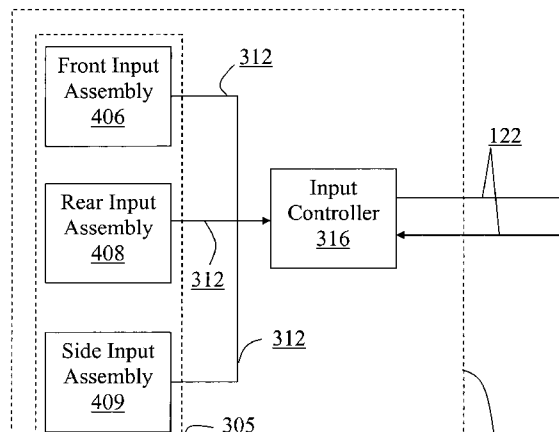
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A human interface and input system is implemented on an input accelerator device to remotely operate hand-held host electronic devices such as cellular phones, PDA's, pocket PC's, and smart phone's. The input accelerator device can control some or all functions of the host device to eliminate the need to directly interface with the host device. The input accelerator device may be configured to optimize a biomechanical effect of a human user's opposing thumb and fingers by including, on one surface, one or more software configurable input elements manipulatable by the user's thumb(s) or finger, and, on another surface, one or more software configurable selection elements manipulatable by a user's finger(s). The input accelerator device can be a hybrid device combining a wireless headset with the device control features.

38 Claims, 13 Drawing Sheets



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