

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SONY COMPUTER ENTERTAINMENT AMERICA LLC  
Petitioner

v.

APLIX IP HOLDINGS CORPORATION  
Patent Owner

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Case No. IPR2015-00533  
Patent No. 7,218,313

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**PETITION FOR *INTER PARTES* REVIEW  
OF U.S. PATENT NO. 7,218,313**

**TABLE OF CONTENTS**

**TABLE OF CONTENTS ..... 1**

**I. INTRODUCTION ..... 1**

**II. SUMMARY OF THE ‘313 PATENT..... 1**

A. DESCRIPTION OF THE ALLEGED INVENTION OF THE ‘313 PATENT ..... 1

B. SUMMARY OF THE PROSECUTION HISTORY OF THE ‘313 PATENT..... 3

**III. REQUIREMENTS FOR INTER PARTES REVIEW UNDER 37 C.F.R. § 42.104 ..... 5**

A. GROUNDS FOR STANDING UNDER 37 C.F.R. § 42.104(A) ..... 5

B. IDENTIFICATION OF CHALLENGE UNDER 37 C.F.R. § 42.104(B) AND RELIEF REQUESTED ..... 5

1. The Grounds For Challenge (37 C.F.R. § 42.104(b)(2)) ..... 6

2. Claim Construction Under 37 C.F.R. § 42.104(b)(3) ..... 7

(a) “substantially optimize a biomechanical effect of the human user’s hand” ..... 7

(b) “delineated active areas” ..... 10

(c) “a game function that is substantially optimized for actuation by the human user's thumb” and “a game function that is substantially optimized for actuation by one or more of the human user's fingers” ..... 11

3. Level of Skill of a Person Having Ordinary Skill in the Art..... 13

**IV. THERE IS A REASONABLE LIKELIHOOD THAT THE CHALLENGED CLAIMS OF THE ‘313 PATENT ARE UNPATENTABLE..... 13**

A. LIEBENOW ANTICIPATES CLAIMS 37-39 AND 49 UNDER 35 U.S.C. § 102(B)..... 13

B. PALLAKOFF IN VIEW OF ISHIHARA RENDERS CLAIMS 15, 20, 37 AND 49 OBVIOUS..... 25

C. PALLAKOFF IN VIEW OF ISHIHARA IN FURTHER VIEW OF LIEBENOW RENDERS CLAIMS 15-16, 20, 37-42, 46, AND 49 OBVIOUS..... 43

D. LIEBENOW IN VIEW OF ISHIHARA RENDERS CLAIMS 37-42, 46, AND 49 OBVIOUS ..... 48

E. LIEBENOW IN VIEW OF ARMSTRONG ‘802 RENDERS CLAIMS 37-41 AND 44-49 OBVIOUS ..... 50

F. LIEBENOW IN VIEW OF HEDBERG RENDERS CLAIMS 37-39 AND 49-51 OBVIOUS AND PALLAKOFF IN VIEW OF ISHIHARA IN FURTHER VIEW OF HEDBERG RENDERS CLAIMS 15, 20, 37 AND 49-51 OBVIOUS ..... 56

**V. MANDATORY NOTICES UNDER 37 C.F.R. § 42.8(A)(1)..... 59**

A. REAL PARTIES-IN-INTEREST AND RELATED MATTERS ..... 59

B. LEAD AND BACK-UP COUNSEL UNDER 37 C.F.R. § 42.8(B)(3)..... 60

C. PAYMENT OF FEES UNDER 37 C.F.R. § 42.103 ..... 60

**VI. CONCLUSION..... 60**

## **I. INTRODUCTION**

Petitioner Sony Computer Entertainment America LLC requests an *Inter Partes* Review (“IPR”) of claims 15, 16, 20, 37-42, and 44-51 (collectively, the “Challenged Claims”) of U.S. Patent No. 7,218,313 (“the ‘313 Patent”) issued on May 15, 2007 to Beth Marcus et al. (“Applicants”). **Exhibit 1001**, *‘313 Patent*.

## **II. SUMMARY OF THE ‘313 PATENT**

### **A. Description of the Alleged Invention of the ‘313 Patent**

The ‘313 Patent describes a user interface and input mechanisms for hand-held electronic devices, such as cell phones and Personal Digital Assistants (PDAs). **Ex. 1001** at 1:5-11; 7:7-11. The ‘313 Patent discloses an electronic device 100 having embedded software, firmware, or software applications that require input from the user in order to perform various functions. *Id.* at 7:12-19, 7:66-8:16. The applications may include, for example, word processing, e-mail, or game applications. *Id.* at 5:39-49; 7:12-19, 7:66-8:16. The user provides inputs via input elements such as keys, buttons, pressure sensor pads, touch pads, or other elements. *Id.* at 7:56-61; *see also, id.* at 9:5-13; 15:24-28. One or more input elements are grouped together in “input assemblies.” *Id.* at 7:52-56. In one embodiment, the electronic device has a first and second input assembly with each input assembly having associated input elements. *Id.* at 8:47-62; Figs. 3A-3B. As shown in the figure below, the electronic device also includes an input controller 216 that receives raw electronic signals from the input elements associated with input assemblies 206 and 208 and converts them “into a

form suitable to be received and interpreted by processor 104.” *Id.* at 7:61-65; *see also, id.* at Fig. 2. A processor 104 subsequently interprets the signals output by the input controller 216 as specific input commands for a particular application. *Id.* at 7:66-8:16. For example, if a text application is running, then the input controller may map a key input to a particular character, or if a game application is running, then the key input may be mapped to a particular game function. *Id.* The input controller 216 also may map one or more of the input elements to functions specific to a particular application. *Id.* at 8:6-25. Additionally, the input functions of input elements may change depending on the application that is being executed. *Id.*

The ’313 Patent discloses arranging the input assemblies in a way that increases data input efficiency based on thumb-finger opposition arrangement of the human user’s hand. For example, in one disclosed embodiment, the first input assembly 340, which includes input elements such as keys or buttons 342 to be actuated by the user’s thumbs, is located on the front-side surface of the device 312 and the second input assembly 350, which includes input elements such as a pressure sensor pad 354 to be actuated by the user’s fingers, is located on the back-side surface of the device 314. *Id.* at Figs. 3A, 3B.

The pressure sensor pad 354 on the back-side surface 314 is divided into one or more “delineated active areas,” which may be configured in the software to correspond to different programmable functions depending on the selected application. *Id.* at 9:24-40; Fig. 3d. The ’313 Patent specification discloses that an

active area can be “delineated” either because it is physically delineated from other active areas (e.g., the areas physically appear as rectangular, oblong, or other shapes) or the user is able to use their fingers to tactilely discriminate between the delineated active areas. *Id.* at 9:58-10:11. Use of a delineated active area on the back-side surface 314 may change the input function of an input element on the front-side surface 312. *Id.* at 10:50-11:28. For example, pressing a delineated active area corresponding to a “Shift” key on the back-side surface may cause a key press on the front-side surface 312 to result in an uppercase letter or a different symbol, for example. *Id.*

**B. Summary of the Prosecution History of the ‘313 Patent**

The U.S. patent application that resulted in the ‘313 Patent was filed on October 31, 2003. *See Exhibit 1002, ‘313 Patent File History* at pp. 274-318. For purposes of this proceeding, Petitioner assumes a priority date of October 31, 2003 for the Challenged Claims. The first substantive office action issued on October 5, 2006 rejected claims 1, 5-19, 23-28, 30, 31, 43-46, 49-53, and 55 as anticipated by U.S. Patent No. 6,909,424 to Liebenow et al. (“Liebenow Patent”), allowed claims 29, 32-42 and 54 and objected to dependent claims 3, 4, 20, 21, 47 and 48 as allowable if written in independent form. *Id.* at pp. 109-117. Regarding allowed claim 29 (which issued as claim 37), the Examiner found that the Liebenow Patent did not teach the following limitation:

wherein at least one of the input elements of the second input assembly is a selectively configurable sensing surface so as to provide a plurality of

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