USITC Inv. No. 337-TA-990 (U.S.Intern.Trade Com'n), USITC Inv. No. 337-TA-1004, USITC Order No. 43, 2017 WL 1352670

United States International Trade Commission (U.S.I.T.C.) *1 Administrative Law Judge Order

IN THE MATTER OF CERTAIN MOBILE AND PORTABLE ELECTRONIC DEVICES INCORPORATING HAPTICS (INCLUDING SMARTPHONES AND LAPTOPS) AND COMPONENTS THEREOF ORDER NO. 43: DENYING RESPONDENT APPLE INC.'S MOTION FOR SUMMARY DETERMINATION THAT U.S. PATENT NO. 7,336,260 DOES NOT CLAIM PATENTABLE SUBJECT MATTER

USITC Inv. Nos. 337-TA-1004, 337-TA-990 (Consolidated) April 6, 2017

On December 15, 2016, Respondent Apple Inc.¹ ("Apple") filed a motion for summary determination (1004-018) that the claims of U.S. Patent No. 7,336,260 ("the '260 patent") do not recite patentable subject matter and thus, are invalid under 35 U.S.C. § 101. On December 27, 2016, Complainant Immersion Corporation ("Immersion") opposed the motion. The Commission Investigative Staff ("Staff") filed a response in support of Apple's motion.

Apple asserts that the '260 patent claims recite nothing more than the abstract process of detecting pressures and then providing tactile sensations in response to an "input device." Apple states that this is not patentable subject matter under *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2437 (2014) ("*Alice*"), but rather something humans have been doing for centuries when they shake hands. For example, humans detect the pressure of the handshake and respond with a corresponding grip and shake. Apple argues that the '260 patent claims do not cite any specific means for detecting pressures or providing tactile sensations nor do they recite any specific method for doing so.

Apple states that the '260 patent specification acknowledges that the claim limitations at issue, both alone and together, are conventionally implemented in a field that is old. (*Id.* at 1.) Apple notes that while the '260 patent acknowledges that it was nothing new for devices to incorporate haptic feedback, the patent discloses as its allegedly novel invention providing tactile sensations for an "input device" by using an actuator and a controller. Apple states that the described input devices, controllers, and actuators are conventional off-the-shelf hardware. (*Id.* at 3 (citing the '260 patent at 2:16-37).)

Apple argues that the invention is not patentable under the first test of *Alice* because it is an abstract idea and therefore does not reflect patentable subject matter. Apple states that the two asserted claims of the patent recite two primary steps, which are then repeated three to four times: (1) detect a pressure; and (2) provide a tactile sensation. Apple notes that the first step is data gathering, which court precedent has held is abstract. Apple asserts that the second step, providing a tactile sensation, is also abstract. While the claims state that a tactile sensation is provided to an input device, Apple argues that the claims do not specify any method by which the result of providing the tactile sensation is accomplished. Apple asserts that the claims are abstract on the independent ground that they recite a method of organizing human behavior that humans have been undertaking since, perhaps, the dawn of the species. (*Id.* at 8-9.)

*2 Apple states that claim 1 is a *Beauregard-style* claim (named after *In re Beauregard*, 53 F.3d 1366, 1373 (2011)) because it is "a claim to a computer readable medium (e.g., a disk, hard drive, or other data storage device) containing program instructions for a computer to perform a particular process. (Mem. at 11 (citing *Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (2010).) Thus, according to Apple, the preamble is irrelevant to whether the patent claims patentable subject matter under 35 U.S.C. **§101**.

Additionally, Apple asserts claim 2 must be treated as a process claim for purposes of determining whether it presents patent eligible subject matter. Apple argues that claims 1 and 2 claims invoke computers, if at all, merely as a tool and do not reflect an improvement in the functioning of a computer. (*Id.* at 11-17.)

Apple states that, having established that the asserted claims are directed to an abstract idea, the claims also fail to meet the second part of the *Alice* test which is to determine whether the claims recite an "inventive concept." Apple states that there is nothing new about providing vibratory feedback in the form of tactile sensations based on a user's input. (*Id.* at 18-21.)

Staff supports Apple's motion. In Staff's view, the asserted claims are too abstract and too broad to be patentable, and do not reflect an inventive step in the application of abstract subject matter. Staff also asserts that the written description confirms the breadth and abstract nature of the asserted claims. (Staff Resp. at 1-17.)

Immersion urges that Apple's motion be denied. Immersion argues that the asserted claims are directed to a computer implemented process which reflects an improvement to computer functionality itself, and are not directed to economic or other tasks in which a computer is used in its ordinary capacity. Immersion asserts that Apple's argument that a human hand is analogous to an input device in the '260 patent is not correct in the context of that patent. Immersion states that the preamble, even if not limiting, is part of the claim and gives it context in determining patent eligibility under section 101. (Immersion Opp. at 11-14.)

Immersion also argues that the asserted claims are not directed to an abstract idea, but rather to an improvement in the functioning of a pressure-sensitive system. More specifically, Immersion asserts that the claims set forth a pressure sensitive feedback system for a computer, wherein the computer-readable medium has instructions that cause the processor to receive signals from an input device that detects at least three levels of pressure that the user applies during an interaction with a graphical object. The pressure-sensitive feedback system then provides confirmatory tactile sensations as the user passes through each pressure level. (*Id.* at 14-15.)

***3** According to Immersion, Apple mischaracterizes the claims as addressing only two steps: detecting pressures and then providing tactile sensations in response. Immersion notes that, by doing so, Apple fails to address the actual benefits and limitations of the claimed invention. Immersion argues that the claimed inventions are directed to more than generic gathering of abstract data and asserts that it is incorrect that the claims do not recite a specific solution to a problem that arose in the realm of computers. Immersion explains that the problem sought to be solved by the patented technology is that the user needs different haptic feedback to assist with using the device in a distracting environment or in bright sunlight. Immersion states that the '260 patent's solution of detecting at least three different levels of pressure during a single interaction and providing haptic feedback based thereon makes it much easier for an electronic device to use a single graphical object for multiple functions because each function is triggered based on a different pressure level, provides improved confirmation of commands, lessens the need for visual confirmation cues to the user, and reduces error and guesswork by the user as to whether they have pressed hard enough to trigger the desired event. Immersion argues that this is not an abstract idea, but an invention that represents a functional and palpable application in the field of computer technology. (*Id.* at 15-19.)

For the reasons set forth below, Apple's motion is hereby denied. Section 101 provides:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101. The courts, however, "have long held that this provision contains an implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice* at 2354 (quoting *Association for Molecular Biology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013).) At the same time, "an invention is not rendered ineligible for patent simply because it involves an abstract concept. Applications of such concepts to a new and useful end ... remain eligible for patent protection." (*Id.*) (citations omitted.) "We have described this analysis as a search for "an inventive concept"--*i.e.*, an element or elements that is "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept itself." (*Id.*) (citations omitted.)

*4 The question of whether a computer program is an abstract idea or whether that computer program is patentable involves an analysis of whether or not the patent reflects an improvement of computer technology. *Enfish, LLC v. Microsoft Corporation*, 822 F.3d 1327, 1338 (Fed. Cir. 2016). The Federal Circuit in *Enfish* found that:

the self-referential table cited in the claim is a specific type of data structure designed to improve the way a computer stores and retrieves data in memory... [t]he claims are directed to a specific implementation of a solution to a problem in the software arts.

Id. The Court distinguished this subject matter from patents wherein a "computer performed 'purely conventional' steps to carry out claims directed to 'abstract idea of determining a price using organization and product group hierarchies," . . . "claims attaching generic computer components to perform 'anonymous loan shopping," . . . "claims adding generic computer components to financial budgeting," . . . "claims implementing offer-based price optimization using conventional computer activities," . . . "claims applying an exchange of advertising for copyrighted content to the internet," . . . "claims directed to abstract idea of 'organizing information through mathematical correlations with recitation of only generic gathering and processing activities." (*Id.* at 1338-1339 (internal citations omitted).)²

The asserted claims of the '260 patent read as follows:

1. A computer-readable medium having instructions, the instructions including instructions that cause a processor to: detect a first pressure on a first input device; provide a first tactile sensation to the first input device, the first tactile sensation based at least in part on the first pressure; detect a second pressure on the first input device, the second pressure greater than the first pressure; and provide a second tactile sensation to the first input device, the second tactile sensation based at least in part on the second pressure; detect a third pressure on the first input device, the third pressure greater than the second pressure; and provide a third tactile sensation to the first input device.

2. The computer-readable medium of claim 1 further comprising stored instructions, the stored instructions including instructions which, when executed by a processor, cause the processor to: detect a fourth pressure on the first input device, the fourth pressure greater than the third pressure; and provide a fourth tactile sensation to the first input device.

***5** (**'260** patent at 20:33-53.)

The undersigned finds that the patent covers patentable subject matter under the first step in *Alice* and is not invalid under **section 101**.³ The patent is directed to solving the problem of the user needing differing haptic feedback to assist with using the device "in bright light environments such as in bright sunlight... [in situations where the user is relying on a device] . . . with small fonts and graphics that are difficult to read and select." (*Id.* at 2:3-5.) The patent resolves this issue by detecting at least three different levels of pressure during a single interaction and providing haptic feedback based thereon. (*Id.* at 12:31-55.) The apparatus described by the '260 patent includes an input device for communicating with the user. As the specification explains,

the claimed "input device" is "capable of resolving multiple levels of pressure placed on the input device, and of transmitting a signal associated with the level of pressure placed on the input device." (*Id.* at 5:48-57.) The apparatus also includes hardware with associated logic to detect pressure and provide sensations based on the pressures (including, for example, a controller or processor configured as claimed and the pressure-sensitive input device), that "process[es] input, execute[s] algorithms, and generate[s] output as necessary to create[] the desired sensations in the input device in response to the inputs received from that input device." (*Id.* at 4:63-5:3.)

The claims also require one or more processors, and the claimed input device communicating with a processor must be pressuresensitive. As evidence of this, among other things, the claims require the detection of multiple pressures. (*Id.* at claim 1, 20:32-47.) The specification explains that the processor "receive[s] information from the input device . . . including ... the amount of pressure applied to the input device." (*Id.* at 4:51-62.)

At each detected level of pressure, the hardware generates and outputs a signal to generate a tactile sensation. The apparatus can detect four or more levels of pressure and generate a tactile sensation at each level. (*Id.* at 6:37-38, 11:6-8, claims 1 and 2, 20:33-47.)

Apple and Staff state that the '260 patent reflects an abstract idea that is not patentable subject matter, more in the nature of a handshake. Apple and Staff also argue that the patent does not cite enough specifics as to what structure is needed or what methodology is used. For the reasons discussed above, there is sufficient explanation of the methodology used as well as the structure used to make clear that the patent reflects patentable subject matter. Furthermore, the '260 patent is not an abstract idea, but rather an improvement in computer technology. As the specification explains, the claimed "input device" is "capable of resolving multiple levels of pressure placed on the input device, and of transmitting a signal associated with the level of pressure placed on the input device." (*Id.* at 5:48-57.) Furthermore, there is nothing in the '260 patent that preempts an entire field as discussed in *Alice*.

*6 Accordingly, Apple's motion for summary determination (1004-018) that the claims of U.S. Patent No. 7,336,260 do not recite patentable subject matter and are invalid under 35 U.S.C. § 101 is hereby denied.

SO ORDERED.

Charles E. **Bullock** Chief Administrative Law Judge

Footnotes

- 1 The '260 patent is only asserted against Apple and not Respondent AT&T Mobility LLC.
- 2 Because the Court found that the patent covered patentable subject matter, it did not make a determination as to the second step which is to determine whether there is a novel concept. *Enfish*, 822 F.3d at 1339.
- 3 In light of this determination, there is no need to analyze whether the subject matter represents a "novel concept" under *Alice*.

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