

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HAND HELD PRODUCTS, INC.,	:	
	:	
Plaintiff,	:	
	:	
v.	:	C.A. No.: 12-768-RGA-MPT
	:	
AMAZON.COM, INC., AMZN MOBILE	:	
LLC, AMAZONFRESH LLC, A9.COM,	:	
INC., A9 INNOVATIONS LLC, AND	:	
QUIDSI, INC.	:	
	:	
Defendants.	:	

REPORT AND RECOMMENDATION

I. INTRODUCTION

This is a patent case. On June 18, 2012, Hand Held Products, Inc. (“HHP”) filed suit alleging Amazon.com, Inc., AMZN Mobile LLC, AmazonFresh LLC, A9.com Inc., A9 Innovations LLC, and Quidsi, Inc. (collectively, “Amazon”) of infringing U.S. Patent No. 6,015,088 (“the ‘088 patent”).¹ Currently before the court is Amazon’s motion for summary judgment of non-infringement.²

II. BACKGROUND OF THE INVENTION

The ‘088 patent is titled “Decoding of Real Time Video Imaging.” “This invention relates to image capturing apparatus, and more particularly to a method of capturing and decoding bar code information in real time from a continuously displayed video

¹ D.I. 1. On September 21, 2012, the parties submitted a Stipulated Order that HHP be permitted to file a Supplemental Complaint. D.I. 11 (Stipulated Order); *id.*, Ex. A (Supplemental Complaint). The court granted that order on September 25, 2012.

² D.I. 257.

signal of a particular target.”³ The abstract recites:

A process allows an image capturing apparatus to be integrated with a personal computer to continuously display a video image of the imaging apparatus. Upon proper input by a user, or automatically after a timed interval, a snapshot of the video image is captured. An autodiscrimination process of the captured video image automatically decodes any bar-coded information present in the captured image and outputs the information.⁴

III. CLAIMS AT ISSUE

HHP asserts Amazon infringes independent claim 1 and claims 8, 10, and 12 which depend therefrom.⁵

Claim 1 recites:

1. A process for capturing and decoding bar-code information in real time from a continuously displayed image video signal, comprising the steps of:

aiming an imaging apparatus at a target of interest, said target having at least one of optically readable and bar coded information contained thereupon;

continually displaying a real time image of said target from said imaging apparatus;

selectively capturing and storing an instantaneous image of said target into the memory of a computer;

determining if bar-coded information is present in said stored image;

decoding bar-code information if bar-code readable information is contained on said instantaneous stored image while maintaining the display of said real-time image; and

outputting the decoded bar-coded information.

³ '088 patent, 1:8-11.

⁴ '088 patent, Abstract.

⁵ The court determined previously-asserted independent claim 22 and its dependent claim 23 are invalid as indefinite and are not at issue in this motion. D.I. 222 at 37-44, 50-52.

IV. LEGAL STANDARD

A grant of summary judgment pursuant to FED. R. CIV. P. 56 is appropriate if materials on the record, such a deposition, documents, electronically stored information, admissions, interrogatory answers, affidavits and other like evidence show that there is no genuine issue as to any material fact, and the moving party is entitled to judgment as a matter of law.⁶ This standard is applicable to all types of cases, including patent cases.⁷ The movant bears the burden of establishing the lack of a genuinely disputed material fact by demonstrating “that there is an absence of evidence to support the nonmoving party’s case.”⁸ “Facts that could alter the outcome are ‘material,’ and disputes are ‘genuine’ if evidence exists from which a rational person could conclude that the position of the person with the burden of proof on the disputed issue is correct.”⁹ “Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no genuine issue for trial.”¹⁰ In a patent case, “[s]ince the ultimate burden of proving infringement rests with the patentee, an accused infringer seeking summary judgment of noninfringement may meet its initial responsibility either by providing evidence that would preclude a finding of infringement, or by showing that the evidence on file fails to establish a material issue of fact essential to the patentee’s case.”¹¹ “An accused device cannot infringe, as a matter of law, if even a single

⁶ FED. R. CIV. P. 56 (a) and (c).

⁷ *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1576-77 (Fed. Cir. 1989).

⁸ *Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986).

⁹ *Horowitz v. Fed. Kemper Life Assurance Co.*, 57 F.3d 300, 302 n.1 (3d Cir.1995) (internal citations omitted).

¹⁰ *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986) (internal quotations omitted).

¹¹ *Novartis Corp. v Ben Venue Labs., Inc.*, 271 F.3d 1043, 1046 (Fed. Cir. 2001); see also *Techsearch L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1369 (Fed. Cir. 2002) (“Summary judgment of noninfringement is also appropriate where the patent owner’s proof is deficient in meeting an essential

limitation is not satisfied.”¹² If an accused infringer demonstrates an absence of material fact, the patent owner “must come forward with ‘specific facts showing that there is a *genuine issue for trial.*’”¹³

V. DISCUSSION

The court issued a Report and Recommendation (“R&R”) construing the term “selectively capturing . . . an instantaneous image” by construing the constituent terms within that phrase: “selectively,” “capturing,” and “instantaneous image.”¹⁴ The court construed “selectively” to mean “selected by the user based on the displayed image.”¹⁵ The court construed “capture” as “converting the live analog video signal into a single digital image.”¹⁶ “[A]n instantaneous image” was construed to mean: “*an instant in time selected by the user based on the displayed image, converting the live analog video signal into a single digital image that is output for storage into computer memory.*”¹⁷ Based on those constructions, the court construed “selectively capturing . . . an instantaneous image” to mean “at an instant in time selected by the user based on the displayed image, converting the live analog video signal into a single digital image that is output for storage into computer memory.”¹⁸

After considering HHP’s objections to the R&R’s construction, Judge Richard

part of the legal standard for infringement, because such failure will render all other facts immaterial.”).

¹² *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1349 (Fed. Cir. 1998).

¹³ *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986) (quoting Fed. R. Civ. P. 56(e)) (emphasis in original).

¹⁴ D.I. 222 at 24-29.

¹⁵ *Id.* at 24-26.

¹⁶ *Id.* at 26-28.

¹⁷ *Id.* at 28-29.

¹⁸ *Id.* at 56. This was the construction proposed by Amazon with the exception that Amazon’s proposed construction included a “single digital frame” which the court changed to a “single digital image.” *Id.* at 29.

Andrews rejected HHP’s arguments and adopted the construction of that term set forth in the R&R.¹⁹ After that decision, HHP served revised infringement contentions which purportedly demonstrate how the Accused Apps infringe under the court’s construction of the “selectively capturing” term.

The accused products in this case are Amazon mobile applications (“Amazon Apps”) which are loaded on consumers’ smartphones and used to find and purchase Amazon products.²⁰ One way the Amazon Apps can be used to find a product on Amazon is by scanning the barcode on the product.²¹ The barcode scanning capability of the Amazon Apps is what HHP accuses of infringing the ‘088 patent. That barcode scanning capability is referred to as the “Accused Apps.”²²

The devices on which the Amazon Apps are used run operating systems. Those operating systems include Apple’s iOS operating system, Google’s Android operating system, and Microsoft’s Windows Phone 7 operating system.²³ An operating system is a collection of software programs and libraries that manages the hardware on a device as well as all of the other software programs that run on the device.²⁴ As is relevant to this case, an operating system manages the Amazon Apps.²⁵ The Amazon Apps HHP accuses of infringement and the operating systems they are alleged to run on in order to infringe are: Amazon Mobile (iOS, Android, WP7), Price Check (iOS, Android), Student

¹⁹ D.I. 240 at 2-4. In its objections to the R&R, “[p]laintiff object[ed] to the limitation requiring the image to be selected ‘by the user.’” *Id.* at 2 (citing D.I. 230 at 1).

²⁰ D.I. 258 at 11.

²¹ *Id.*

²² D.I. 259 (Declaration of Chandrajit L. Bajaj, Ph.D.) at ¶ 3 n.2.

²³ *Id.* at ¶¶ 7-8.

²⁴ *Id.* at ¶ 7.

²⁵ *Id.* at ¶ 8.

(iOS, Android), AmazonFresh (iOS, Android), Flow (iOS, Android), AmazonLocal Merchants (iOS, Android), BeautyBar (iOS), Diapers (iOS, Android), Wag (iOS, Android), YoYo (iOS), Soap (iOS, Android), Casa (iOS), Afterschool (iOS), Bookworm (iOS), and Vine (iOS).²⁶ Each of those Apps is available for download by the general public, free of charge, from an online App store such as Apple's App Store, Google Play, Amazon's Appstore for Android, and Windows Store.²⁷

Amazon cites the '088 patent specification's explanation of how an image is selectively captured in the disclosed embodiment. The specification describes a system that combines a conventional video camera, a general purpose computer, a conventional "video capture card," and conventional barcode decoding software to allow a user to take a "snapshot" of an object having barcodes on it so the barcodes can be decoded.²⁸ According to the specification: (i) a user aims the video camera at an object having a barcode on it and the video camera generates a live video display of the object on a computer monitor;²⁹ (ii) when the user determines by looking at the computer monitor that the object is properly focused and a resolved image appears on the monitor,³⁰ the user takes a "snapshot" picture of the object by, for instance, pressing a key on a computer keyboard or clicking a mouse;³¹ (iii) when the user snaps the picture, within the computer a single image from the analog video is converted into digital form

²⁶ D.I. 260, Ex. A (August 19, 2013 Infringement Contentions) at 2-3.

²⁷ D.I. 259 at ¶ 9.

²⁸ '088 patent, 1:14-64, 3:53-67, 4:6-10, 4:62-64, 5:3-8, 7:28-36.

²⁹ '088 patent, 4:62-5:8, 5:20-22, 10:24-28.

³⁰ '088 patent, 5:9-12, 5:20-22.

³¹ '088 patent, 4:44-54, 5:9-30, 10:29-30. The user can take the picture by, for example, pressing a key on a computer key on a computer keyboard, clicking a mouse, setting a timer, or other means. '088 patent, 4:23-26, 4:44-54, Fig. 1 (illustrating user inputs as "KEYBOARD, MOUSE, TIMER, ETC.") (emphasis added).

by the “video capture card”;³² (iv) the single digital snapshot is stored;³³ and (v) the barcode decoding software automatically decodes barcodes within the snapshot.³⁴

Amazon contends HHP’s new infringement contentions fail because the Accused Apps purportedly do not allow a *user* to take a picture or otherwise select an instant in time and, even if they did, they do not convert images from *analog* to digital form.³⁵

Amazon also maintains HHP’s opposition to its summary judgment motion largely relies on arguments made during claim construction that were rejected and, therefore, cannot be the basis for denying its motion.³⁶

Amazon argues the Accused Apps do not function in the manner described in the ‘088 patent and, specifically, do not perform “selectively capturing” as construed by the court. According to Amazon, to a user of the Accused Apps, each works in substantially the same way.³⁷ Once a user initiates the Accused App, a live video is presented on the smartphone’s screen showing whatever the camera is initially pointed at.³⁸ Overlaid on top of the video display are two orange brackets (referred to as “arrows”).³⁹ Text above the arrows reads “Center barcode between the arrows”; text below the arrows reads “Barcode will scan automatically. Try to avoid shadows and glare.”⁴⁰

³² ‘088 patent, 4:44-54, 5:22-27, 10:29-30.

³³ ‘088 patent 5:11-13, 5:24-27, 10:29-30.

³⁴ ‘088 patent, 5:31-6:38, 10:31-35.

³⁵ D.I. 258 at 2; *id.* at 3 (“These applications do not permit users to take pictures at all. Nor do they allow users to select any single image for conversion from analog into digital form, or to select an instant in time when such analog-to-digital conversion will occur. Indeed, the accused applications do not allow a user to select a single image or a single instant in time for any purposes whatsoever.”).

³⁶ *Id.* at 2, 4-5.

³⁷ D.I. 259 at ¶ 11.

³⁸ *Id.*

³⁹ *Id.* at ¶¶ 12-13.

⁴⁰ *Id.* The Amazon Flow App for iOS and Android do not overlay arrows or the same text as the other Accused Apps. *Id.* at ¶ 14. Instead these Apps only overlay text at the bottom of the screen that states “Line up text left to right” (iOS) and “Scan products, phone numbers, URLs, Barcodes, and QR

Amazon contends it is undisputed that a *user* of the Accused Apps cannot take the requisite snapshot by pressing a shutter button, setting a timer, or in any other manner.⁴¹ Even if a user watching the live video wanted to select a particular instant in time to capture a single video image, the Accused Apps do not provide any mechanism by which they could communicate that selection to the Accused App.⁴² Amazon insists a user of the Accused Apps simply is not able to select any image or any instant in time based on the display.⁴³ Amazon maintains, therefore, that the Accused Apps cannot infringe the asserted claims because a user of the Accused Apps is unable to make that selection as required by the court’s construction of the “selectively capturing” terms: “at an instant in time *selected by the user* based on the displayed image, converting the live analog video signal into a single digital image that is output for storage into computer memory.”

The court agrees with Amazon that the Accused Apps provide no mechanism by which a *user* selects an instant in time to capture a barcode image and, therefore, the Accused Apps do not infringe the asserted claims of the ‘088 patent.

HHP contends that one flaw in Amazon’s argument is that Amazon improperly limits the mechanisms for user selection to a key or button.⁴⁴ First, the court’s construction of “selectively capturing” did not include any limitation on the manner in which the user selects an instant in time to capture an image. Nor did it imply such a

codes” (iOS and Android). *Id.* As relevant to Amazon’s motion, however, the operation of the Flow Apps is the same as that of the other Accused Apps. *Id.* at ¶¶ 11, 15-16.

⁴¹ *Id.* at ¶ 15.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ D.I. 266 at 19, 21.

limit in its discussion of the term “selectively”: “the specification explicitly states ‘regardless of the mode selected,’ e.g., keyboard mouse, or timer”⁴⁵ Second, Amazon did not include that limitation. The portion of Amazon’s opening brief HHP cites in support of its contention states the Accused Apps do not infringe because a user cannot select an image by “pressing a shutter button, not be setting a timer, *and not by doing anything else.*”⁴⁶

Because the court did not construe “selectively capturing” to be limited to a user utilizing a keypad, mouse click, or timer, HHP contends the user “selectively captures” a barcode image by aiming the camera at a barcode, centering the image, and holding the camera steady.

*Once the camera has been aimed at the target of interest and the camera is turned on, the user will continue to center the camera image by centering it in the proper zone on the display and holding the camera steady. The user selectively captures the barcode by putting it within the measurement region of the camera and adjusting the image so that the barcode is appropriately aligned and reasonably stable within the measurement region. The live analog video signal (from the sensor) is converted into a single digital image that is output for storage in computer memory then placed into the computer memory.*⁴⁷

Despite the fact that aiming is not part of the “selectively capturing” limitation, it is a separate limitation, i.e. the first step set forth in claim 1, “aiming an imaging apparatus at a target of interest, said target having at least one of optically readable and bar coded information contained thereupon,”⁴⁸ HHP contends the user aiming the camera at a barcode is part of how the user purportedly selectively captures an image. HHP states

⁴⁵ D.I. 222 at 26 (emphasis added).

⁴⁶ D.I. 266 at 21 (quoting D.I. 258 at 15) (emphasis added).

⁴⁷ D.I.267 (Declaration of Larina A. Alton), Ex. C at 6-7 (emphasis added).

⁴⁸ ‘088 patent, claim 1.

the Accused Apps measure and respond to two aspects of user input reflecting an instant in time selected by the user: “Has the user placed a pattern in my measurement region?” and “is my accelerometer stability measurement within range?”⁴⁹ According to HHP, these inputs from the user are measured by the smartphone’s camera and its accelerometer, as called for by the Accused Apps, and are analogous to the mouse click, keyboard, and/or timer inputs described in the specification of the ‘088 patent.⁵⁰ HHP maintains that unless the user puts the barcode within the designated region or field of view of the camera and also holds the camera steady on the barcode, no copy of the digital image is made into RAM for further processing.⁵¹

HHP notes Amazon specifically instructs and assists the user to make those inputs to the application based upon the displayed image. Amazon instructs users to use the displayed image by placing it within a desired measurement region, improving the image, and holding the smartphone within accelerometer limits:

“Center barcode between the arrows. . . Try to avoid shadows and glare”

“1. Try reducing the glare on the item 2. Move the camera closer, but stay in focus”

“Hold steady . . .”

“Center Barcode between the arrows”⁵²

HHP further points out Amazon employs graphics (either blue floating dots or capture bars that change color on the screen) to assist the user in making this

⁴⁹ D.I. 268 (Declaration of Andrew Wolfe) at ¶ 83.

⁵⁰ *Id.* at ¶¶ 83-84.

⁵¹ D.I. 266 at 16.

⁵² D.I. 268 at ¶ 86.

selection;⁵³ the bars are orange until the user places an appropriately aligned barcode within them, at which point the capture bar turns green, and the image is captured for the user.⁵⁴ The blue dots of other Accused Apps help the user orient the phone and capture a barcode.⁵⁵

The court does not agree with HHP that a user aiming the camera, centering the barcode, and holding the camera steady is analogous selecting a particular image using a mouse click, keyboard, and/or timer inputs described in the specification of the '088 patent because it is the Accused Apps that make the selection despite the fact that the user takes those preliminary actions. As HHP acknowledges, “[t]he issue . . . really comes down to the proper application of the Court’s construction to the facts set forth in Hand Held’s contentions.”⁵⁶ Despite the infringement contention, above, stating the user selectively captures an image by taking those preliminary actions, in subsequent contentions, HHP alleges the *Accused Apps*, not the user, performs the “selectively capturing” step.

*The selective capturing and storing of an instantaneous image of said target into the memory of a computer is performed by Amazon Mobile by establishing and/or applying criteria that determine what images and/or which portions of the images will be selected, designated for further detection and decoding, and stored.*⁵⁷

The Mobile application monitors current and historical readings from the

⁵³ *Id.* at ¶ 87.

⁵⁴ D.I. 266 at 17.

⁵⁵ *Id.*

⁵⁶ *Id.* at 19.

⁵⁷ D.I. 260, Ex. C at 9 (emphasis added). The court notes HHP’s infringement contentions alleging the Accused Apps perform the “selectively capturing” limitation, in part, by “*designat[ing] for further detection and decoding*” is strikingly similar to the construction for the “selectively capturing” terms it advocated during the *Markman* process: “*designating a real-time image for attempted decoding, based on one or more conditions and placing it in memory.*” D.I. 222 at 23. The court rejected this proposed construction. *Id.* at 23-29.

accelerometer as well as the camera to determine when the user is holding the camera steady enough to obtain reliable image data. Based on this assessment of user behavior, *the Mobile applications selectively captures* and stores an instantaneous image of the target into the memory of the device and attempts to detect and decode a barcode symbol in the image.⁵⁸

Additionally, *the Mobile application selectively captures* based on the possibility of being aimed at a barcode. After the user has adjusted the image so that the barcode is within the preferred measurement region, appropriately aligned, and reasonably stable, the live analog video signal (from the sensor) is converted into a single digital image that is output for storage in computer memory then placed into the computer memory.⁵⁹

It is the *user* who must make the selection of the instant in time to capture the barcode image, not the Accused Apps. Judge Andrews previously rejected HHP's suggestion to the contrary. In its objection relating to the to the R&R's "selectively capturing" construction, HHP offered a new construction that did not require a user to select the image. HHP proposed a modification of the R&R's construction of the "selectively capturing" term to allow the processor, rather than the user, to make the selection: "at an instant in time selected by the user based on the displayed image or the processor, converting the live analog video signal into a single digital image that is output for storage into computer memory."⁶⁰ Judge Andrews held "[t]his proposal was

⁵⁸ D.I. 260, Ex. C at 9 (emphasis added).

⁵⁹ *Id.*, Ex. C at 10 (emphasis added). Indeed, the technical tutorial HHP used at the *Markman* hearing demonstrates the user of the Accused Apps need not even touch the smartphone after the Accused App is activated. Instead, the smartphone can be mounted and the user simply moves an object having a barcode in front of the camera until the barcode is properly centered, at which time the Accused App automatically decodes the barcode. D.I. 258 at 4; D.I. 260 at Ex. B (DVD of HHP tutorial). HHP states that is not how smartphones are typically operated by their users and was done so the exemplary video could clearly depict the operation of the Accused Apps for the convenience of the court. D.I. 268 at ¶ 102. It also argues that, even in the video, a user still had to move an object to orient the barcode within the scan region of the application in order to obtain a single image to be stored in RAM. *Id.* HHP concludes, therefore, user selection of the image containing the barcode takes place even in the circumstance of the video. *Id.* The court disagrees. The video demonstrates the Accused App automatically making the selection of the image to capture without a command from the user.

⁶⁰ D.I. 230 at 10 (emphasis in original).

not before the Magistrate Judge and is therefore not timely raised. Even if it were, however, the Court agrees with the Magistrate Judge's construction *requiring a user to selectively capture the image.*"⁶¹

Because a user of the Accused Apps cannot make the selection of an instantaneous image to capture, the "selectively capturing" limitation is not met by those applications and summary judgment of noninfringement is warranted.⁶²

VI. RECOMMENDED DISPOSITION

Consistent with the findings contained in the Report and Recommendation, IT IS RECOMMENDED that Amazon's motion for summary judgment (D.I. 257) be GRANTED and Amazon's motion for leave to respond to HHP's sur-reply (D.I. 282) be DENIED as MOOT.

Pursuant to 28 U.S.C. § 636(b)(1)(B), FED. R. CIV. P. 72 (b)(1), and D. DEL. LR 72.1, any objections to the Report and Recommendation shall be filed within fourteen (14) days limited to ten (10) pages after being served with the same. Any response shall be limited to ten (10) pages.

The parties are directed to the Court's Standing Order in Non-Pro Se Matters for Objections Filed under FED. R. CIV. P. 72 dated November 16, 2009, a copy of which is found on the Court's website (www.ded.uscourts.gov).

⁶¹ D.I. 240 at 4 (emphasis added). As explained above, the court has rejected HHP's current position that the user does perform the "selectively capturing" step.

⁶² In light of this determination, the court need not address Amazon's alternative arguments for summary judgment. Also, after Amazon filed its reply brief, HHP, on November 3, 2015, filed a sur-reply due to Amazon purportedly submitting new information and contentions in its reply brief in the form of an additional declaration of its expert, Bajaj. D.I. 280 at 1. In response, Amazon filed a motion for leave to respond to that sur-reply, which Amazon alleges was improperly filed. D.I. 282. Because the court was able to resolve Amazon's motion with reference only to the parties' opening and answering briefs, and did not rely on either Amazon's reply brief or HHP's sur-reply brief, Amazon's motion is denied as moot.

Wilmington, Delaware
January 21, 2016

s/ Mary Pat Thyng
UNITED STATES MAGISTRATE JUDGE