

Page 1	Page 3
<p>1 UNITED STATES PATENT AND TRADEMARK OFFICE 2 BEFORE THE PATENT TRIAL AND APPEAL BOARD 3 4 5 GARMIN INTERNATIONAL, INC.;</p> <p>6 and GARMIN USA, INC., Case No. IPR2018-00564 7 IPR2018-00565 8 Petitioners, 9 10 vs. U.S. Patent No. 6,059,576 11 12 LOGANTREE, LP, 13 14 Patent Owner. 15 16 17 18 19 20 21 22 23 24 25</p> <p style="text-align: center;">DEPOSITION OF VIJAY K. MADISETTI, Ph.D.</p> <p style="text-align: center;">February 7, 2019 9:47 a.m.</p> <p style="text-align: center;">Building 13 2900 Chamblee Tucker Road Atlanta, Georgia 30341</p>	<p>1 INDEX TO EXHIBITS 2 EXHIBIT DESCRIPTION PAGE 3 Exhibit 1009 Patent 5,976,083 7 4 to Richardson, et al. 5 6 7 (Original Exhibits A, B, 2001, 1001, 1004, 1006, 8 1007, 1008, and 1009 were attached to the original 9 transcript.) 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>
Page 2	Page 4
<p>1 INDEX OF EXAMINATIONS 2 WITNESS: VIJAY K. MADISETTI, Ph.D. 3 EXAMINATION Page 4 By Ms. Redmond 7 5 6 INDEX TO EXHIBITS 7 EXHIBIT DESCRIPTION PAGE 8 Exhibit A Patent Owner's Response 7 9 (564 case) 10 Exhibit 2001 Declaration of Vijay K. 7 11 Madiseti, Ph.D. (564 case) 12 Exhibit B Patent Owner's Response 7 13 (565 case) 14 Exhibit 2001 Declaration of Vijay K. 7 15 Madiseti, Ph.D. (565 case) 16 Exhibit 1001 Patent 6,059,576 to Brann 7 17 Exhibit 1004 Patent 5,978,972 to 7 18 Stewart, et al. 19 Exhibit 1006 Patent 5,546,609 7 20 to Rush, III 21 Exhibit 1007 Patent 5,197,489 7 22 to Conlan 23 Exhibit 1008 Patent 5,474,083 7 24 to Church, et al. 25</p>	<p>1 UNITED STATES PATENT AND TRADEMARK OFFICE 2 BEFORE THE PATENT TRIAL AND APPEAL BOARD 3 4 GARMIN INTERNATIONAL, INC.;</p> <p>5 and GARMIN USA, INC., Case No. IPR2018-00564 6 IPR2018-00565 7 Petitioners, 8 9 vs. U.S. Patent No. 6,059,576 10 11 LOGANTREE, LP, 12 13 Patent Owner. 14 15 16 17 18 19 20 21 22 23 24 25</p> <p style="text-align: center;">DEPOSITION OF VIJAY K. MADISETTI, Ph.D., produced, sworn, and examined on Thursday, February 7, 2019, between the hours of 9:47 a.m. and 11:34 a.m. of that day, located a 2900 Chamblee Tucker Road, Building 13, Atlanta, Georgia 30041, before Thomas R. Brezina, CRR, RMR, CCR, in a certain case now pending in the United States Patent and Trademark Office Before the Patent Trial and Appeal Board, Garmin International, Inc.; and Garmin USA, Inc. versus LoganTree, LP.</p>

Page 5

1 APPEARANCES OF COUNSEL  
2  
3 On behalf of the Petitioners:  
4 (present via speakerphone)  
5 MEGAN J. REDMOND, Esquire  
6 Erise IP PA  
7 7015 College Boulevard  
8 Suite 700  
9 Overland Park, Kansas 66211  
10 Tel: (913) 777-5600  
11 Fax: (913) 777-5601  
12 megan.redmond@eriseip.com  
13  
14  
15 On behalf of the Patent Owner:  
16 M. COLLIN QUIGLEY, Esquire  
17 McCathern, PLLC  
18 3710 Rawlins Street  
19 Suite 1600  
20 Dallas, Texas 75219  
21 Tel: (214) 741-2662  
22 Fax: (214) 741-4717  
23 E-mail: Cquigley@mccathernlaw.com  
24  
25

Page 6

1 CHRISTOPHER M. BARKLEY, Esquire  
2 McCathern, PLLC  
3 523 West Sixth Street  
4 Suite 830  
5 Los Angeles, California 90014  
6 Tel: (213) 225-6150  
7 Fax: (213) 225-6151  
8 Cbarkley@McCathernlaw.com  
9  
10 Also Present: (via telephone)  
11 Mr. Sam Korte  
12  
13  
14 Court Reporter:  
15 Thomas R. Brezina, CRR, RMR, CCR-B-2035  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

Page 7

1 (Exhibits Numbers 2001, 1001, 1004,  
2 1006, 1007, 1008, 1009, 2001, A, and B were  
3 marked for identification.)  
4 Deposition of Vijay K. Madiseti, Ph.D.  
5 February 7, 2019  
6 VIJAY K. MADISETTI, Ph.D.,  
7 having been produced and first duly sworn as a  
8 witness, testified as follows:  
9 EXAMINATION  
10 BY MS. REDMOND:  
11 **Q Dr. Madiseti, I'd like to start by**  
12 **having you state your name and address for the**  
13 **record.**  
14 A Yes. Good morning. My name is Vijay  
15 K. Madiseti. My address is 56 Creekside Park Drive  
16 in Johns Creek, Georgia 30022.  
17 **Q Great. And, Dr. Madiseti, you have**  
18 **been deposed before; correct?**  
19 A Yes.  
20 **Q So you're generally familiar with the**  
21 **rules of the deposition; is that correct?**  
22 A Yes.  
23 **Q Just a reminder, I will ask some good**  
24 **questions, and I may ask some poor questions today.**  
25 **Will you please ask me to clarify if my question is**

Page 8

1 unclear?  
2 A I will.  
3 **Q Great. And if you have answered my**  
4 **question, it's safe to assume that you have**  
5 **understood my question. Is that fair as well?**  
6 A Yes, it is.  
7 **Q Great. And is there any medical reason**  
8 **that would prevent you from giving truthful**  
9 **testimony here today?**  
10 A No.  
11 **Q Great. About how many times have you**  
12 **served as an expert witness?**  
13 A Quite a few times. Probably around 25  
14 to 30, maybe more.  
15 **Q Maybe more. About how many times have**  
16 **you been deposed, do you think? About the same**  
17 **amount?**  
18 A Yes. Maybe a little more. Maybe 50 to  
19 75 or a little more.  
20 **Q Great. I'd like to begin today by**  
21 **talking about the Stewart reference, and it's, for**  
22 **the record, in tab six of your deposition binder,**  
23 **and for the record, that is Garmin Exhibit 1004. So**  
24 **let me know when you have turned to the Stewart**  
25 **reference.**

Page 9

1 A Yes. I'm at the Stewart reference,  
 2 Exhibit Number --  
 3 **Q Great.**  
 4 A -- 6 (sic).  
 5 **Q If you had -- perfect. And if you will**  
 6 **turn to exhibit -- or, sorry, figure one of Exhibit**  
 7 **1004, I would appreciate it.**  
 8 (A cellular telephone rang.)  
 9 THE WITNESS: One second. Was it  
 10 figure one?  
 11 BY MS. REDMOND:  
 12 **Q Figure one, please, of Exhibit 1004,**  
 13 **which is the Stewart reference.**  
 14 A Yes. I'm at figure one.  
 15 **Q Trying to talk through this figure with**  
 16 **you this morning. I see we have a -- do you see**  
 17 **Number 11 in the upper left-hand corner?**  
 18 A Yes. There is a Number 11 on the upper  
 19 left corner.  
 20 **Q And what is Number 11? If it's helpful**  
 21 **to refresh your recollection, you can go to column**  
 22 **six, line 13.**  
 23 A Yes. I'm at column six. I was going  
 24 through those sections. There are --  
 25 **Q Yes.**

Page 10

1 A -- three accelerometers. There are  
 2 three accelerometers numbered ten through 12.  
 3 **Q Great. So turning back to figure one**  
 4 **for me, please, you'd agree with me that 11 is an**  
 5 **accelerometer?**  
 6 A Yes.  
 7 **Q And then that accelerometer, what is it**  
 8 **doing there? What is the purpose of the**  
 9 **accelerometer here?**  
 10 A I understand the -- the specification  
 11 of column six describing the various embodiments  
 12 with these accelerometers, ten through 12.  
 13 **Q Sure. But generally what**  
 14 **functionality -- what functions is the accelerometer**  
 15 **performing in figure one?**  
 16 A I think they're listed in column six  
 17 with respect to identifying translational, angular,  
 18 and normal accelerations in column --  
 19 **Q Is it -- oh, sorry. Finish.**  
 20 A Yes. In column six, lines ten through  
 21 12.  
 22 **Q And is this description consistent with**  
 23 **what you understand to be an accelerometer?**  
 24 A Are you referring to a portion of my  
 25 report or declaration? Just to be clear.

Page 11

1 **Q No. I'm just asking -- I'm just asking**  
 2 **for your general understanding of accelerometers.**  
 3 A Outside the context of this IPR, I  
 4 mean, and outside the context of the '576, I would  
 5 say that this would generally be a good description  
 6 of an accelerometer.  
 7 **Q And then from the accelerometer there,**  
 8 **11, I see the diagram is an arrow pointing to an AD**  
 9 **converter on figure one. Do you see that?**  
 10 A I can see a block 46 in figure one.  
 11 That is titled A-to-D converter.  
 12 **Q Right. And what is a purpose here of**  
 13 **the AD converter?**  
 14 A As described in columns eight -- column  
 15 eight of the specification of the 972 patent, which  
 16 is the Stewart patent, the A-to-D converter would --  
 17 would receive as a part of its input channels, the  
 18 outputs of the accelerometer and provide, for  
 19 example, a 12-bit representation as described --  
 20 **Q Right.**  
 21 A -- in columns eight, 40 through 50.  
 22 **Q Right. So is the accelerometer sending**  
 23 **analog signals to the AD converter, 46?**  
 24 A The accelerometer is receiving analog  
 25 signals from the -- the A-to-D converter is

Page 12

1 receiving analog signals from the accelerometer,  
 2 yes.  
 3 **Q Thank you. Thank you for that. And --**  
 4 A It can also --  
 5 **Q -- as part of that process -- oh, go**  
 6 **ahead.**  
 7 A Column eight also describes, you could  
 8 receive digital inputs as well.  
 9 **Q But here at least in figure one we have**  
 10 **an AD converter, so those would likely be analog**  
 11 **signals coming across; correct?**  
 12 A As for column eight, lines 50 to 58, I  
 13 believe the embodiment also cover the case where  
 14 digital inputs may be received.  
 15 **Q Sure. I guess my question was specific**  
 16 **with respect to figure one. Here, figure one, why**  
 17 **would you have an A-to-D converter if it was already**  
 18 **in digital?**  
 19 A Again, you could have different types  
 20 of formats and different types of conversions that  
 21 the A-to-D converters could do.  
 22 **Q And I don't see any storage that occurs**  
 23 **between the accelerometer and the AD converter. Do**  
 24 **you? On figure one.**  
 25 A Figure one is a -- is a high-level

Page 13

1 block diagram, and it is not, I believe, intended to  
 2 be a detailed schematic. It is possible that this  
 3 data could be stored. The -- it is not unusual for  
 4 data from sensors to be collected, stored,  
 5 processed, and forwarded.  
 6 So, for example, in column ten -- in  
 7 column ten and other locations there are several  
 8 different embodiments of different types of A-to-D  
 9 conversion as well in addition to those in seven and  
 10 eight. So one of ordinary skill in the art would --  
 11 would view this as a high-level description that may  
 12 include local storage as well.  
 13 **Q Sure. I guess my question is, sticking**  
 14 **with figure one here, is there any storage between**  
 15 **the accelerometer and the A-to-D converter? Is**  
 16 **there any storage step?**  
 17 A My understanding is that reading the  
 18 description in column eight, specifically with  
 19 respect to the sample and hold feature delineated in  
 20 lines 45 through 50, it is possible that there is  
 21 some local storage that could include counters and  
 22 other hold circuitry.  
 23 **Q Specifically with respect to figure**  
 24 **one, let me ask the question again. Is there any**  
 25 **storage depicted on figure one between step 11, the**

Page 14

1 **accelerometer, and the AD converter, 46?**  
 2 A As I said, figure one is a very  
 3 high-level description. There is no explicit  
 4 identification of specific functionality of each of  
 5 these blocks. It is possible that block 46 may have  
 6 access, for example, to block 48. It is possible  
 7 that block 46 may have access to block 51.  
 8 In any case, at the -- to answer your  
 9 question, there is no explicit description of a  
 10 storage within block 46 as written in English, but  
 11 one of ordinary skill in the art in the light of the  
 12 specification and knowledge would understand that  
 13 A-to-D converters normally would include some form  
 14 of storage.  
 15 **Q And as far as Stewart's description of**  
 16 **A-to-D converter 46, is there any explicit teaching**  
 17 **in Stewart that that A-to-D converter, 46, had**  
 18 **storage?**  
 19 A Yes. In column eight it describes the  
 20 use of a hold type of feature, so using hold, using  
 21 counters, and other types of disclosures of column  
 22 eight, lines 40 through 60, would indicate that  
 23 there is explicit disclosure of forms of storage  
 24 within the embodiments disclosed in the 972.  
 25 **Q And I see that there is a Max 188**

Page 15

1 **disclosed in that paragraph, is there not?**  
 2 A Yes. There is a disclosure in column  
 3 eight, lines 45 through 50.  
 4 **Q And did you go and try to determine any**  
 5 **information about the Max 188 disclosed in that**  
 6 **paragraph?**  
 7 A I'm familiar with similar A-to-D  
 8 converters, and I've used several over the past two  
 9 decades. The type of converters that include these  
 10 multiple channels that have various resolution in  
 11 terms of bits -- they use different types of sample  
 12 and hold circuitry -- do include local storage in  
 13 terms of sampling, in terms of conversion to the  
 14 right number of bits through successive  
 15 approximation of a device. So I'm familiar with the  
 16 type of A-to-D converters that are disclosed.  
 17 **Q My question is -- sure. I'm**  
 18 **specifically asking about the Max 188 disclosed. As**  
 19 **of 1997 are you familiar with the functionality of**  
 20 **that Max 188 disclosed here?**  
 21 A First of all, the Max 188 is an example  
 22 here, and it discloses a number of multi-channel  
 23 A-to-D converters. In my experience I've not --  
 24 I've looked at similar ones, but I've not -- in the  
 25 context of this particular case I have not

Page 16

1 specifically looked up the data sheet of the Max 188  
 2 in this matter. But I'm -- I'm providing you an  
 3 answer based on my past experience with similar, if  
 4 not the same, type of converter.  
 5 **Q Obviously Stewart discloses a -- are**  
 6 **you familiar with the HAT system? Is that right?**  
 7 A Yes.  
 8 **Q And you're familiar with the fact that**  
 9 **that HAT system can be used on multiple body parts;**  
 10 **is that correct?**  
 11 A Could you refer me to the  
 12 specification --  
 13 **Q Sure.**  
 14 A -- that you are referring to?  
 15 **Q Sure. Exhibit 1004, column four,**  
 16 **starting at line 32, it says, "While developed**  
 17 **specifically for the head, monitoring of other body**  
 18 **parts or the body in general is envisioned."**  
 19 **Do you see that?**  
 20 A In the summary of the invention there  
 21 is the disclosure that you just read out.  
 22 **Q Right. So you would agree with me,**  
 23 **then, as one of ordinary skill in the art, Stewart's**  
 24 **invention applied to not just the head, but other**  
 25 **body parts?**

Page 17

1 A Yes. It is contemplated and envisioned  
 2 that the invention, though specifically designed for  
 3 the head, could in general monitor -- monitor other  
 4 body parts.  
 5 **Q And is the head a body part, in your**  
 6 **opinion?**  
 7 A Yes.  
 8 **Q But you'd agree with me, for example, a**  
 9 **golf club would not be a body part; correct?**  
 10 A A golf club is not a -- I don't believe  
 11 it's a -- it's a body part.  
 12 **Q And one of the goals of Stewart is, it**  
 13 **was designed to not inhibit or impact the ability of**  
 14 **a user to perform a sport; correct?**  
 15 A Again, could you refer me to the  
 16 section that you're referring to?  
 17 **Q Are you generally familiar with the**  
 18 **contents in the disclosures of Stewart in connection**  
 19 **with your opinions?**  
 20 A Yes, I am. But since it is a very  
 21 precise question, if you have a particular section  
 22 that you are trying to get me to comment on, I'll be  
 23 glad to do that.  
 24 **Q So six, line 27.**  
 25 A Yes. I'm looking at column six, lines

Page 18

1 27.  
 2 **Q Yes. And actually I believe it starts**  
 3 **closer to 25.**  
 4 A Okay.  
 5 **Q "In this way the HAT is comfortable**  
 6 **enough for the sports person to wear in relevant**  
 7 **everyday sports activities without hindering,**  
 8 **inhibiting, or otherwise affecting the ability of**  
 9 **the user to perform a sport"; correct?**  
 10 A Yes. That is what the specification  
 11 confirms in column six, lines 25 through 29.  
 12 **Q And that is consistent with your**  
 13 **understanding of Stewart: That it is trying to let**  
 14 **the sportsman play the sport without any inhibiting**  
 15 **based on the Stewart invention; correct?**  
 16 A Yes. That is consistent with this  
 17 portion of the specification, that it's comfortable  
 18 enough without hindering, inhibiting, or otherwise  
 19 affecting the ability of the user to perform the  
 20 sport.  
 21 **Q Right. So, for example, if someone**  
 22 **wants to do an illegal sparring move in football,**  
 23 **the Stewart invention is not going to inhibit them**  
 24 **from doing that; correct?**  
 25 A I don't see that disclosure here.

Page 19

1 **Q You don't understand that -- I believe**  
 2 **Stewart does talk about illegal sparring moves in**  
 3 **football. Correct?**  
 4 A Where do you see that?  
 5 **Q You don't recall that one way or**  
 6 **another from your review of Stewart?**  
 7 A I mean, as I said, I mean, Stewart has  
 8 a lot of disclosures. I mean, could you be more  
 9 specific?  
 10 **Q No. I'm just asking you generally**  
 11 **about your understanding of Stewart. So, for**  
 12 **example, Stewart tries to let the sportsman move how**  
 13 **they're going to move in their respective sport and**  
 14 **the invention itself not inhibit that movement. Do**  
 15 **you agree with that?**  
 16 A I mean, again, I would say that we  
 17 should refer to the description that -- in column  
 18 six, 25 through 29, in Stewart's own words. I would  
 19 agree that it would allow the sports person to  
 20 perform the sport without hindering, inhibiting, or  
 21 otherwise affecting. I don't see any disclosure  
 22 that it -- I don't see a disclosure of Stewart with  
 23 respect to illegal moves, unless you can --  
 24 **Q Sure.**  
 25 A -- you can point something to me.

Page 20

1 **Q I'm just asking for your general**  
 2 **understanding of Stewart in connection with your**  
 3 **opinions here. So with respect to --**  
 4 A I don't see --  
 5 **Q -- Stewart --**  
 6 A Yes. I don't see such --  
 7 **Q Go ahead.**  
 8 A I don't see the explicit connection  
 9 here.  
 10 **Q Understood. And with respect to**  
 11 **Stewart, it's trying to not restrain any movement;**  
 12 **correct?**  
 13 A My understanding is that it does not  
 14 hinder, inhibit, or otherwise affect the ability of  
 15 the user to perform the sport. That's how I would  
 16 characterize in Stewart's own words.  
 17 **Q So you don't have an opinion about**  
 18 **whether Stewart restrains any movement?**  
 19 A I mean, you're using certain claim  
 20 language from the '576, which is causing, I believe,  
 21 the confusion. Stewart in his own words describes  
 22 in column six that everyday sports can be -- are not  
 23 affected, and there is no hindering, inhibiting, or  
 24 otherwise affecting the ability of the user to  
 25 perform the sport.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.