

1 UNITED STATES PATENT AND TRADEMARK OFFICE  
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD

3 Case IPR2017-02023

4 Patent 6,434,212

5  
6 TOMTOM, INC., and TOMTOM )

7 INTERNATIONAL, B.V., )

8 Petitioners, )

9 vs. )

10 BLACKBIRD TECH LLC, d/b/a )

11 BLACKBIRD TECHNOLOGIES, )

12 Patent Owner.

13

14

15 DEPOSITION OF THOMAS P. BLACKADAR

16 WEDNESDAY - JUNE 27, 2018

17 9:25 A.M. - 2:22 P.M.

18

19

20 PEPPER HAMILTON LLP

21 125 HIGH STREET

22 BOSTON, MASSACHUSETTS

23

24 Reported by: Dawn Mack-Boaden, RPR

25

<p style="text-align: right;">Page 2</p> <p>1 APPEARANCES</p> <p>2</p> <p>3 ON BEHALF OF THE PATENT OWNER,</p> <p>4 BLACKBIRD TECH LLC, d/b/a BLACKBIRD TECHNOLOGIES:</p> <p>5 Walter D. Davis, Jr., Esquire</p> <p>6 Davidson Berquist Jackson &amp; Gowdey LLP</p> <p>7 8300 Greensboro Drive, Suite 500</p> <p>8 McLean, Virginia 22102</p> <p>9 (571) 765-7709</p> <p>10 wdavis@dbjg.com</p> <p>11</p> <p>12 ON BEHALF OF THE PETITIONERS, TOMTOM, INC., and</p> <p>13 TOMTOM INTERNATIONAL, B.V.:</p> <p>14 Dipu A. Doshi, Esquire</p> <p>15 BLANK ROME LLP</p> <p>16 1825 Eye Street NW</p> <p>17 Washington, D.C. 20006</p> <p>18 (202) 420-2604</p> <p>19 ddoshi@blankrome.com</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 4</p> <p>1 P-R-O-C-E-E-D-I-N-G-S</p> <p>2</p> <p>3 THOMAS P. BLACKADAR, a witness first</p> <p>4 having been satisfactorily identified by the</p> <p>5 production of his Massachusetts driver's</p> <p>6 license, was sworn and testified as follows:</p> <p>7</p> <p>8 DIRECT EXAMINATION</p> <p>9 BY MR. DAVIS:</p> <p>10 Q. Good morning, Mr. Blackadar.</p> <p>11 A. Good morning.</p> <p>12 Q. So we met each other earlier. I'm Walter</p> <p>13 Davis. It's nice to meet you.</p> <p>14 Do you understand that you're here to</p> <p>15 provide testimony related to a particular -- an IPR?</p> <p>16 A. Yes.</p> <p>17 Q. And that's IPR 2017-02023. That's the</p> <p>18 number.</p> <p>19 Could you state your name for the record.</p> <p>20 A. Thomas Blackadar.</p> <p>21 Q. And, Mr. Blackadar, have you ever had your</p> <p>22 deposition taken before?</p> <p>23 A. I have.</p> <p>24 Q. How many times?</p> <p>25 A. Twice.</p>
<p style="text-align: right;">Page 3</p> <p>1 INDEX</p> <p>2 EXAMINATION PAGE</p> <p>3 THOMAS P. BLACKADAR</p> <p>4 By Mr. Davis 4</p> <p>5 By Mr. Doshi 111</p> <p>6</p> <p>7</p> <p>8 EXHIBIT INDEX</p> <p>9 NO. DESCRIPTION PAGE</p> <p>10 1021: Curriculum Vitae 12</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 5</p> <p>1 Q. Twice. Okay. What were those two times?</p> <p>2 A. One was Nike v. Adidas, and the other one</p> <p>3 was Reebok v. FitSense; and that was a contract</p> <p>4 matter, the second one.</p> <p>5 Q. I'll get to that in a second.</p> <p>6 So the Nike v. Adidas, what kind of case</p> <p>7 was that?</p> <p>8 A. They were -- Nike was suing or whatever,</p> <p>9 infringement -- infringement suing, I guess is the</p> <p>10 word -- it was back in 2006 -- on a patent that I</p> <p>11 had sold to Nike, and so I was being interviewed</p> <p>12 about that.</p> <p>13 Q. Okay. So you were deposed as a fact</p> <p>14 witness?</p> <p>15 A. Uh-huh.</p> <p>16 Q. And when did you say that was?</p> <p>17 A. I believe it was 2006.</p> <p>18 Q. And the Reebok v. FitSense. FitSense:</p> <p>19 That's your company?</p> <p>20 A. That was my company. I was CEO.</p> <p>21 Q. That was your company. And that was --</p> <p>22 that was a contract dispute, you said?</p> <p>23 A. It was.</p> <p>24 Q. And when was that deposition?</p> <p>25 A. I'm going to say it was somewhere right</p>

<p style="text-align: right;">Page 6</p> <p>1 around 2000.  2 Q. Somewhere around 2000?  3 A. Yeah.  4 Q. Okay. So it's been quite some time  5 since --  6 A. Yes.  7 Q. -- your last deposition, bottom line.  8 I'll try to make this as painless as  9 possible today. Since it has been some time since  10 your last deposition, I want to go over a few of  11 just the basic rules, which I'm sure your attorney  12 did as well.  13 So we're here today; essentially, today's  14 procedure is going to be a question and answer  15 session. I'm going to ask you questions, and, you  16 know, you'll provide me with answers to the best of  17 your ability.  18 One thing when you provide answers, please  19 make sure that they're audible so that the court  20 reporter can understand. And that means in two  21 ways. 1. Certainly speak up; but it also means to  22 do more than simply nod or shake your head.  23 Actually say what -- what the answer is.  24 And sometimes that gets tough because  25 that's not necessarily the way that we talk to each</p>	<p style="text-align: right;">Page 8</p> <p>1 provide truthful testimony today?  2 A. There's no reason.  3 Q. That's the answer I would expect. One  4 thing -- and I'm not sure -- you may or may not be  5 aware of this, but one of the rules associated with  6 IPRs in general, but certainly this IPR specifically  7 too, is when we take breaks, certainly you're going  8 to be talking with your attorney, but the one thing  9 you can't talk about is the substance of your  10 testimony unless there is an outstanding question  11 about attorney-client privilege, which I doubt there  12 will be in this case. Does that make sense?  13 A. Yes.  14 Q. I have this little --  15 MR. DOSHI: We can agree to that.  16 BY MR. DAVIS:  17 Q. There's a little rule here, but I don't --  18 this is not an exhibit. I just wanted to make sure  19 that you understood that so that there's no  20 confusion.  21 A. It was explained to me by my attorney.  22 Q. Great. I thought it might be.  23 Mr. Blackadar, what did you do to prepare  24 for your testimony today?  25 A. I -- it's been a year since I -- almost a</p>
<p style="text-align: right;">Page 7</p> <p>1 other as people. But we'll get used to it. Maybe  2 that's unfortunate, but we will.  3 Let's try not to talk over each other.  4 Again, sometimes that also gets tough because when  5 you have a conversation, that naturally happens; but  6 let's try to do a good job of not talking over each  7 other. And that goes for me as well.  8 We can and will -- we will take several  9 breaks throughout the course of today's session.  10 Typically, I like to take breaks about every hour.  11 If for some reason you need a break before that,  12 please let me know, and we'll take a break. The one  13 thing that I would ask is if I have an outstanding  14 question, answer it before we actually take a break.  15 Okay?  16 A. Okay.  17 Q. And we've already -- try as I may, my  18 questions are not always perfectly phrased, and I'm  19 sure your attorney will have something to say about  20 that if they are really bad.  21 That said, if you don't understand a  22 question of mine, please let me know, and I'll try  23 to reform it in a way that's more understandable.  24 Is there any reason, whether that be  25 sickness or otherwise, that you won't be able to</p>	<p style="text-align: right;">Page 9</p> <p>1 year since I did the declaration. And so I -- last  2 week when we understood that there was a date, I  3 went through and -- all of the literature, the court  4 documents, everything that's happened since last  5 year, and re-reviewed the patents. And yesterday I  6 met with Dipu to just go over and prep for this  7 meeting.  8 Q. Okay. And when you say you went over the  9 materials, did that include -- that includes the  10 petition?  11 A. Yes.  12 Q. Your declaration?  13 A. Yes.  14 Q. The prior art you cited in your  15 declaration?  16 A. Yes.  17 Q. Does it include Blackbird's preliminary  18 response?  19 A. Yes.  20 Q. Does it include the institution's decision  21 by the board?  22 A. Yes.  23 Q. Okay. Are there any other big ticket items  24 that I'm missing?  25 Well, if there are any that are relevant,</p>

<p style="text-align: right;">Page 10</p> <p>1 I'm sure they'll come up in the course of questions.  2 But it includes at least --  3 A. Yes.  4 Q. At least those documents; right?  5 And when you met with your attorney, that  6 was just yesterday?  7 A. Yes.  8 Q. And how long did you meet?  9 A. Probably five to six hours.  10 Q. Okay. How long in total, including the  11 meeting yesterday, would you say you spent preparing  12 for today's deposition?  13 A. Sixteen hours.  14 Q. Sixteen hours.  15 A. Just shy. Good enough.  16 Q. Pretty precise. Okay. Mr. Blackadar, this  17 is -- for our purposes and the court reporter's  18 purposes, most of the exhibits already have exhibit  19 numbers from the IPR. So we're not going to need to  20 mark most of them. There may be one or two. Okay.  21 So I'm going to hand you a copy of your  22 declaration, which is Exhibit 1005.  23 MR. DAVIS: I have a copy here if you  24 want it or you can just use --  25 MR. DOSHI: I'll just use mine.</p>	<p style="text-align: right;">Page 12</p> <p>1 and we can go from there.  2 MR. DAVIS: I'll take copies. I have --  3 that will probably be easier. I have copies  4 of his CV from another IPR that you did  5 earlier in 2017, but if your attorney has  6 copies that we already know to be accurate,  7 then let's take those.  8 MR. DOSHI: Okay. Do you want to mark  9 these?  10 MR. DAVIS: Yes.  11 *****  12 (Exhibit Number 1021 was marked for  13 identification.)  14 *****  15 BY MR. DAVIS:  16 Q. Mr. Blackadar, you have in front of you  17 what has been marked as Exhibit 1021. Is this your  18 current CV?  19 A. Yes, sir.  20 Q. Current as of today?  21 A. Yes, sir.  22 Q. Okay. Looking at your CV, I see you have a  23 BS in electrical engineering and computer science  24 from the University of New Hampshire?  25 A. Yes, sir.</p>
<p style="text-align: right;">Page 11</p> <p>1 MR. DAVIS: Okay.  2 BY MR. DAVIS:  3 Q. This is your declaration, correct,  4 Exhibit 1005?  5 A. Yes, it is.  6 Q. And if we could turn to -- it's page 4,  7 Paragraph 3.  8 A. Page?  9 Q. It's Paragraph 3 of your declaration, which  10 is on page 4. It's page 4 of 87, but then there are  11 also paragraph numbers.  12 A. Okay. Here we go.  13 Q. So the first sentence there indicates that  14 your CV is attached as Attachment A to the  15 declaration.  16 A. Yes.  17 Q. And I didn't actually see your CV attached  18 to the declaration in just flipping through it.  19 But -- go ahead.  20 MR. DOSHI: It was inadvertently  21 admitted from the exhibit.  22 MR. DAVIS: I understand, and I'm not  23 making a big deal out of it.  24 MR. DOSHI: I do have copies if you want  25 them now, or you can just ask him questions</p>	<p style="text-align: right;">Page 13</p> <p>1 Q. With a concentration of biomedical and a  2 minor in history; is that right?  3 A. Yes, sir.  4 Q. Did any of your studies relate to motion  5 tracking, motion analysis, or inertial sensing?  6 A. My physics courses taught me about inertial  7 navigation. That's it.  8 Q. Is that it?  9 A. Yes.  10 Q. How about -- how about signal analysis?  11 A. Many courses on signal analysis from  12 communications to acoustics, and I took a course on  13 signal to noise.  14 Q. That's a pretty good memory.  15 A. Yeah.  16 Q. I don't think I could recite many of the  17 courses I took in college.  18 So -- sorry?  19 A. No. I think that's it.  20 Q. Okay.  21 A. Probably a few more that I'm missing.  22 Q. The first -- looking at your work  23 experience now, the first item that you have going  24 all the way back is BBN Computer Company from 1982  25 to '86.</p>

<p style="text-align: right;">Page 14</p> <p>1 A. Yes, sir.</p> <p>2 Q. Where you were a senior -- a test engineer?</p> <p>3 A. Yes, sir.</p> <p>4 Q. And did any of your work experience there</p> <p>5 have to do with motion tracking, motion analysis, or</p> <p>6 inertial sensing?</p> <p>7 A. At BBN at the computer company as a test</p> <p>8 engineer, no.</p> <p>9 Q. Okay. And how about signal analysis?</p> <p>10 A. Yes.</p> <p>11 Q. In what sense for signal analysis?</p> <p>12 A. There is a technique in troubleshooting and</p> <p>13 developing test fixtures that one would actually</p> <p>14 inject signals into a circuit card and then read</p> <p>15 them back.</p> <p>16 It has evolved since 1983/'84 into a fairly</p> <p>17 large industry, and they call it Quinepro.</p> <p>18 Q. And moving -- moving on up to BBN Advanced</p> <p>19 Computers from 1986 to 1991, director of operations.</p> <p>20 What did you do as director of operations</p> <p>21 at BBN Advanced Computers?</p> <p>22 A. I ran the support group, the manufacturing</p> <p>23 group, and sustaining engineer group. That was my</p> <p>24 final position at BBN Advanced Computers.</p> <p>25 I started off as a -- just a systems</p>	<p style="text-align: right;">Page 16</p> <p>1 A. Yes.</p> <p>2 Q. In what sense?</p> <p>3 A. One of the DARPA projects that we did was</p> <p>4 called the personal inertia navigation system where</p> <p>5 we measured -- put sensors on the body, in</p> <p>6 particular on the leg/ankle, and measured a person's</p> <p>7 location in free space as they walked around a</p> <p>8 building. We telemetered it back to a map, and we</p> <p>9 were able to effectively follow somebody in a</p> <p>10 building from outside the building and know which</p> <p>11 floor they were on, which stairwell they were in,</p> <p>12 all by an inertial navigation system.</p> <p>13 Q. And when was that DARPA project?</p> <p>14 A. That was '95 through '97.</p> <p>15 Q. Okay.</p> <p>16 A. Dr. Lawrence Sheer was my program manager</p> <p>17 for that -- well, project engineer -- my Ph.D. doing</p> <p>18 it.</p> <p>19 Q. Anything else provide -- during that time</p> <p>20 period as the advanced network department manager,</p> <p>21 did anything else provide you with experience in</p> <p>22 motion tracking, motion analysis, or inertial</p> <p>23 sensing?</p> <p>24 A. Yes. There was a counter sniper program</p> <p>25 which was effectively using -- detecting where a</p>
<p style="text-align: right;">Page 15</p> <p>1 engineer and then worked my way on up.</p> <p>2 Q. And did any of that work experience as just</p> <p>3 for this entry, the director of operations, provide</p> <p>4 you with experience in motion tracking, motion</p> <p>5 analysis, or inertial sensing?</p> <p>6 A. No, sir.</p> <p>7 Q. How about signal analysis?</p> <p>8 A. Just as it pertained to debugging hardware.</p> <p>9 Q. Okay. Your next experience at BBN it says</p> <p>10 BBN Technologies Advanced Networking Department</p> <p>11 Manager, '91 to '97.</p> <p>12 And what did you do as the advanced</p> <p>13 networking department manager?</p> <p>14 A. I did all of the -- I was in charge of all</p> <p>15 of the manufacturing for all of BBN, sustaining the</p> <p>16 support group, sustaining the products in the field,</p> <p>17 and running the advanced networking group; and most</p> <p>18 of that was consulting work for the Defense Advanced</p> <p>19 Research Projects Agency.</p> <p>20 I wrote proposals, architected crafty</p> <p>21 things that we thought DARPA might want, and</p> <p>22 delivered on it.</p> <p>23 Q. And did any of that provide you with</p> <p>24 experience in motion tracking, motion analysis, or</p> <p>25 inertial sensing?</p>	<p style="text-align: right;">Page 17</p> <p>1 shot came from using acoustic waveforms,</p> <p>2 triangulation, and then trajectory.</p> <p>3 Q. Okay. Other than the DARPA project and the</p> <p>4 sniper project, was there anything else in that time</p> <p>5 frame as the advanced networking department manager</p> <p>6 that provided you experience in motion tracking,</p> <p>7 motion analysis, or inertial sensing?</p> <p>8 A. Not that I can recall.</p> <p>9 Q. Okay.</p> <p>10 A. I do recall there was one other one. It</p> <p>11 was a project out of the U.S. ARIEM, the Army</p> <p>12 Research Institute for Environmental Medicine.</p> <p>13 We worked for -- did a project to harden</p> <p>14 one of Dr. Hoyt's -- who was the inventor -- shoe</p> <p>15 sensors to measure a person as they were walking;</p> <p>16 measuring the contact time on the ground. So we did</p> <p>17 a hardened sensor for him.</p> <p>18 Q. And when was that?</p> <p>19 A. 1996. Completed it in June.</p> <p>20 MR. DOSHI: Can you repeat back the</p> <p>21 answer before that one.</p> <p>22 *****</p> <p>23 (The answer was read back as follows:</p> <p>24 "I do recall there was one other one. It</p> <p>25 was a project out of the U.S. ARIEM, the</p>

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