

EXHIBIT 1

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

ORACLE AMERICA, INC.,)
Plaintiff,)
vs.) No. CV 10-03561 WHA
GOOGLE, INC.,)
Defendant.)
-----)

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Videotaped Deposition of JOSHUA BLOCH,
at 333 Twin Dolphin Drive, Suite 400,
Redwood Shores, California, commencing
at 9:34 a.m., Friday, July 8, 2011,
before Leslie Rockwood, RPR, CSR No. 3462.

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1 were big programs written in Java. Java was one of the
2 three main languages we used.

3 Q. And when you say three main languages were
4 used, again, you're referring to use as a development
5 language for Google's services? 10:22:31

6 A. Precisely.

7 Q. Now, when you started at Google, what was
8 your title?

9 A. There are many different kinds of titles at
10 Google. 10:23:02

11 Q. What was on your business card?

12 A. Software engineer.

13 Q. And then did you get an additional business
14 card titles or different business card titles as time
15 went on? 10:23:12

16 A. Yes.

17 Q. What was that progression?

18 A. I had one other title on a business card, and
19 that was chief Java architect.

20 Q. And you used the past tense for that. Is 10:23:21
21 that still true?

22 A. I'm out of business cards.

23 Q. I'm sorry?

24 A. I'm out of business cards.

25 Q. Did you -- did that title change? 10:23:33

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1 A. We'll know when I order my next set of
2 business cards. It's pretty much up to me.

3 Q. And so what is your -- you are still employed
4 by Google as of today?

5 A. I am. 10:23:44

6 Q. And what titles do you have at Google?

7 A. I am a -- I believe they call it senior staff
8 engineer. I don't -- I don't -- or senior staff software
9 engineer, and I use the courtesy title of chief Java
10 architect occasionally. 10:24:16

11 Q. Then you continue to serve as Google's
12 representative at the JCP; correct?

13 A. Yes.

14 Q. And then -- and you have a role at the Open
15 Source Programs Office up through today; is that correct? 10:24:28

16 A. Yes.

17 Q. And at some point you were a quote, member,
18 unquote of the Android team?

19 A. That is correct.

20 Q. And so from 2008 to the present, have you had 10:24:38
21 any other roles of that level of definition?

22 MR. PURCELL: Object to the form.

23 MS. MC GLONE: Object to the form.

24 THE WITNESS: Object. I can't object.

25 What do you mean by "that level of 10:24:54

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1 definition"? The point is that serving on the JCP EC is
2 not the same thing as, you know -- in one case you're
3 talking about the manager to whom I report; right? So
4 I -- tell me what question you actually want me to
5 answer. 10:25:13

6 Q. BY MR. JACOBS: Fair enough.

7 From 2008 to the present, what role at Google
8 has taken the majority of your time?

9 A. From the beginning of 2008 to the present?

10 I -- I do not know. That's a very hard question to. 10:25:38
11 Answer without an accounting for all my hours, I simply
12 can't answer that question.

13 THE VIDEOGRAPHER: Careful.

14 THE WITNESS: Sorry about that. Did you lose
15 a cable you need? 10:25:51

16 THE VIDEOGRAPHER: No, no.

17 THE WITNESS: All right.

18 Q. BY MR. JACOBS: When you joined the Android
19 team, did you give up some duties?

20 A. Yes. 10:26:00

21 Q. What did you give up?

22 A. Well, I was no longer working on the team
23 that had been decommissioned, for lack of a better word.
24 That is the Java infrastructure team. So I needed to
25 find a new place to work, and that was what I found. 10:26:16

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1 develop will be happier, they'll be more productive, and
2 the API -- you know, good APIs are good for the companies
3 that wrote the APIs, they're good for the companies that
4 use the APIs; correspondingly, bad ones are bad for you.

5 And this talk told you a bunch of what it 12:00:03
6 takes to write good APIs. But it is a craft. It's not a
7 science. And so I kind of tell people go forth and
8 practice the craft proudly. Oh, and don't expect to
9 achieve perfection because it's pretty much impossible,
10 you know, by its nature. You don't find out until years 12:00:23
11 later if you did it right.

12 Q. As you reviewed the presentation today, did
13 you see anything in it that you would change if you were
14 to give this presentation now?

15 MS. MC GLONE: Object to the form of the 12:00:34
16 question.

17 MR. PURCELL: Join.

18 THE WITNESS: That said, yes, because I've
19 given it many times since 2005 and I have changed things.
20 You know, I've come up with better examples for some of 12:00:43
21 the points. I've removed slides that I felt didn't
22 necessarily pay for themselves. And, you know, so there
23 are certainly small changes that I would make. But
24 generally speaking, the talk -- not generally speaking.
25 The talk has received very favorable reviews every time 12:01:04

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1 I've given it, you know, even in its earliest form.

2 Q. BY MR. JACOBS: All right. Perhaps I should
3 have asked a slightly more precise question. Is there
4 anything in the slides that we've discussed that you
5 regard now as inaccurate? 12:01:18

6 A. My gosh.

7 Q. The ones we've discussed.

8 A. Almost certainly, but nothing that comes to
9 mind immediately. I could look at all of them and read
10 all the bullets and, you know, see. If there's any 12:01:29
11 particular that you wonder whether I find inaccurate,
12 feel free to can ask me.

13 Q. All right. I'm going to ask you about the
14 conclusion slide.

15 A. Ah, all right. That's right where we were. 12:01:44

16 Well, I still feel that it's noble and
17 rewarding. When I say rewarding, you know, I'm not
18 talking about remunerative. I'm saying in a deeper,
19 philosophical sense, I find it very rewarding to design
20 great APIs and have people come to me years later and 12:01:56
21 say, wow, you know, the collections framework changed my
22 life. Basically there's no higher compliment that you
23 can pay to an API designer.

24 I do believe that well-designed APIs improve
25 the lot of programmers, end-users, and companies -- you 12:02:11

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1 know, I don't know why I picked on companies. I think it
2 would be better to say organizations. One of the things
3 that happened sort of between then and now is that
4 non-company organizations have become more important in
5 software due to the Open Source movement. So that's not 12:02:27
6 something wrong, but it's an omission.

7 Certainly this talk did cover some of the
8 heuristics of the craft. Certainly I don't want you have
9 to adhere to them slavishly, but I do want you to think
10 about it each time you violate one. I still believe that 12:02:45
11 API design is tough. I still believe that it's not a
12 solitary activity. You have to bounce your APIs off of
13 other people to find out if they really will achieve what
14 you want them to achieve, and I certainly believe that
15 accepting trivial case perfection is unachievable. So 12:02:58
16 no, I still believe these conclusions.

17 Q. Now, you refer to the feedback you've gotten
18 on the talk.

19 A. Uh-huh.

20 Q. Favorable feedback. 12:03:16

21 A. Uh-huh.

22 Q. Any critical feedback?

23 A. You can't please all the people all the time,
24 but I can't actually remember any critical feedback. If
25 you want to see what kind of feedback the talk got, I 12:03:26

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1 Q. And then you go down to number 5, mobile. Do
2 you see there are 40 developers in mobile in that entry?

3 A. I see the number 40, but it's unclear to me
4 that it refers to -- oh, yes, it says with associated
5 number of developers. Yes. 12:40:02

6 Q. And what was your understanding of what
7 mobile was referring to?

8 MS. MC GLONE: Object to the form of the
9 question.

10 MR. PURCELL: Join. 12:40:07

11 THE WITNESS: I had no understanding. Don't
12 even know if I read that line.

13 Q. BY MR. JACOBS: Who was Pablo Bellver in
14 relation to you?

15 A. Pablo Bellver was a member of my team. He 12:40:16
16 wrote various pieces of the Java infrastructure.

17 Q. So he was part of the Java engineering
18 infrastructure group?

19 A. Java infrastructure group, yes.

20 Q. Sorry. Pablo Bellver was part of the Java 12:40:42
21 infrastructure engineering group?

22 A. Did we have an engineering in our title? I
23 don't think we did. I think we were just the Java
24 infrastructure group.

25 Q. He was part of that group? 12:40:54

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1 A. He was.

2 MR. JACOBS: Would you like to break for
3 lunch?

4 MR. PURCELL: Sure.

5 MS. MC GLONE: Sounds good. 12:41:05

6 THE VIDEOGRAPHER: The time is now
7 12:41 p.m., and we're going off the record.

8 (Lunch recess.)

9 THE VIDEOGRAPHER: The time is now 1:38 p.m.
10 We are back on the record. 13:38:41

11 MR. JACOBS: Next.

12 (Exhibit 200 was marked for identification.)

13 Q. BY MR. JACOBS: Exhibit 200 is an email
14 string which ends with an email from Ed Cobb dated
15 August 14th, 2007. 13:39:13

16 Do you see that?

17 A. I do.

18 Q. Take a minute to read this email string
19 regarding Sun OpenJDK derivative TCK license conference
20 call update re discussions with Sun on Apache Sun 13:39:25
21 dispute.

22 Okay?

23 A. Pretty much.

24 One thing that's missing from here is Ed
25 Cobb's email address. Could you provide that, or his 13:42:59

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1 affiliation at least?

2 Q. I'll try and do that. That was actually my
3 first question to you is: Who is Ed Cobb?

4 A. Well, some guy who was on the JCP at the
5 time, but I forget who he represented. 13:43:12

6 Q. So this email string, Sun OpenJDK derivative
7 TCK license, went to Ed Cobb's email dated August 14th,
8 2007. That was sent to you because you were on the JCP;
9 is that correct?

10 A. Yes. In fact, it was sent to probably -- 13:43:26
11 that is an interesting question, actually. I cannot say
12 with certainty, and the more I look at it, the more I
13 think that is not why it was sent to me.

14 Q. Why do you think it was sent to you?

15 MS. MC GLONE: Object to the form of the 13:43:53
16 question.

17 THE WITNESS: I believe it was sent to me in
18 connection with -- let me look at the date before I
19 answer this. I cannot say with certainty, but I could
20 speculate. 13:44:22

21 Q. BY MR. JACOBS: Do you see that it starts
22 with an email from your collaborator, Doug Lea, at the
23 bottom?

24 A. Uh-huh.

25 Q. And he reports on the news that has -- that 13:44:29

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1 then prompts this email string.

2 Do you see that?

3 A. Uh-huh.

4 Q. And then there is an exchange among the --

5 some of the participants on this email address list about 13:44:40

6 the Sun announcement.

7 You saw that?

8 A. Uh-huh.

9 Q. You saw that exchange. "Yes"?

10 A. Yes. 13:44:49

11 Q. So what was your understanding in August of

12 2007 of the dispute that is the subject of this email

13 string?

14 MS. MC GLONE: Object to the form of the

15 question. 13:45:03

16 MR. PURCELL: I'll join.

17 THE WITNESS: There was a longstanding

18 dispute between Apache and Sun concerning Sun's promise

19 to grant Apache a license to implement Java SE as

20 consistent with the JSPA. 13:45:30

21 Q. BY MR. JACOBS: Let's break that down. Who

22 is Apache?

23 A. Apache is the Apache Software Foundation, and

24 they were involved in producing, and in fact, I think

25 still are, involved in producing an Open Source 13:45:54

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1 implementation of Java SE and were promised that they
2 would get a TCK license from Sun to do this. But Sun had
3 not made good on that promise at the time this letter was
4 written, and that was the nature of the dispute.

5 Q. When you say they had not made good on the 13:46:18
6 promise, what do you mean?

7 A. I mean that no license was forthcoming. No
8 license had been granted.

9 Q. And the -- there's a reference in this email
10 string to a field-of-use issue. Do you recall what the 13:46:34
11 field-of-use issue was?

12 A. Yes. Field of use is a license that
13 restricts the field of use in which a work may be used,
14 basically grants the license only so long as the work is
15 not used in some particular area. And this was not 13:47:03
16 acceptable to Apache, and according to substantially
17 every member of the JCP, notably including Oracle and
18 Google, not consistent with the JSPA.

19 Q. And the JSPA, what is that?

20 A. The JSPA is the set of agreements that 13:47:30
21 constitute the JCP. JCP isn't really an organization
22 per se, but was an agreement called the JSPA that its
23 members signed.

24 Q. And so the nature of the dispute that's
25 described in this email string from August 14th, 2007 is 13:47:50

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1 that Sun's TCK offer to Apache has this field-of-use
2 limitation in it; correct?

3 A. Near as I can tell, that may be an
4 oversimplification. According to Doug, an OpenJDK TCK
5 license was made available, but that license, since it 13:48:22
6 says OpenJDK, presumably has nothing to do with Apache.
7 So there's not enough context for me to figure it all out
8 from this email.

9 Q. So OpenJDK, in the last email, "Wayne, as I'm
10 sure you know, the JSPA has no standing when it comes to 13:48:38
11 OpenJDK, which is Sun's own OSS" -- Open Source software;
12 right?

13 A. (Witness nods head.)

14 Q. "Which is Sun's own OSS playground. IMO,"
15 that's "in my opinion"; right? 13:48:49

16 A. Yes.

17 Q. "The whole reason for the GPL is to protect
18 Sun's licensing business."

19 Now, you understood that what was being
20 referred to was the application of the GPL to OpenJDK; 13:48:58
21 correct?

22 A. Probably not. I don't even know if I even
23 read this paragraph.

24 Q. Probably not, you didn't understand it at the
25 time or you don't understand it? 13:49:10

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1 MS. MC GLONE: Object to the form of the
2 question.

3 MR. PURCELL: Join.

4 THE WITNESS: I can't read their mind, but
5 there appears to be something there. 15:10:27

6 Q. BY MR. JACOBS: Well, somebody wrote this
7 paragraph. You can't be sure whether it was you or Bob;
8 right?

9 A. Uh-huh.

10 Q. When you saw it in this email exchange, did 15:10:35
11 you go to yourself, no, no, no, that's not what Sun is
12 thinking at all?

13 MS. MC GLONE: Object to the form of the
14 question.

15 THE WITNESS: No, I did not do that. 15:10:43

16 Q. BY MR. JACOBS: And the -- again, the Pablo
17 whose writing back to you is?

18 A. Bellver.

19 (Exhibit 207 was marked for identification.)

20 Q. BY MR. JACOBS: 207 is an email string ending 15:11:59
21 with an email from you dated December 16, 2008, to Andrew
22 Rubin re meeting.

23 Do you see that?

24 A. Yes.

25 Q. I want to ask you a couple of questions about 15:12:18

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1 this email string between you and others under the re
2 line meeting. Steve Horowitz, was Steve on the Android
3 team?

4 A. Presumably so. I don't remember him.

5 Q. And of course, Andy Rubin was leading the 15:12:47
6 Android team; correct?

7 A. Yes.

8 Q. And you write to Steve: "PS, I am currently
9 working on a drop-in replacement for Harmony's sort
10 function, which has demonstrated a huge up to 20X 15:13:03
11 performance improvements on G1 hardware. This will be my
12 first contribution to Android."

13 Do you see that?

14 A. I do.

15 Q. What is the -- what's the name of that 15:13:15
16 drop-in replacement?

17 A. TimSort.

18 Q. And what was the project that you were doing
19 that led to your developing this TimSort drop-in
20 replacement? 15:13:35

21 A. I undertook it personally a couple years
22 earlier after a conversation with Guido van Rossum.
23 TimSort is Python's system sort. He told me about it.
24 He said it's really fast. I said, oh, wow, I wonder if
25 we can make it work in the Java programming language and 15:13:56

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1 contribute it to all the platforms.

2 Q. And so when you say you undertook it
3 personally, in what way did it fit into your job duties?

4 A. My job duties are moderately flexible, and if
5 I see something that, you know, I think could be 15:14:10
6 beneficial to Google and to the broader Java ecosystem,
7 and my manager doesn't object, I do it.

8 Q. What was G1 hardware?

9 A. That was the earliest Android hardware. I
10 had tried it out at about that time. That is towards the 15:14:33
11 end of 2008 on Android hardware and found that it
12 provided a good speed boost.

13 Q. And when you said a 20X performance
14 improvement, how were you measuring that performance
15 improvement? 15:14:51

16 A. Probably using a small micro-benchmarking
17 framework that I wrote for myself many years ago, and I
18 tend to use for micro-benchmarks.

19 Q. When you say "micro-benchmark," what do you
20 mean? 15:15:08

21 A. I mean a small benchmark of an individual
22 functional library as opposed to a benchmark of an entire
23 system.

24 Q. So when you were referring to 20X performance
25 improvement, you were referring to 20X performance of the 15:15:17

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1 particular functionality you were working on?

2 A. Yeah, sorting an array of a certain size.

3 You know, I don't know whether it was a -- probably was

4 not a -- sorry. Just sorting an array of elements.

5 That's good enough.

15:15:34

6 Q. What -- and did you have in your mind what

7 implication that would have for ultimate performance

8 improvement in an end-user context?

9 A. No.

10 Q. Would it be trivial?

15:15:45

11 A. It depends on the application.

12 Q. What kind of application would matter?

13 A. You know, if there were an application that

14 sorted a lot of data, it could make it significantly

15 faster.

15:15:57

16 Q. And by "significantly faster," you mean

17 something that would bear on the -- that would bear on

18 the user experience in running that application?

19 A. It's not beyond the realm of reason.

20 Q. That sounds very cautious, not beyond --

15:16:07

21 A. You have to be very cautious when you're

22 talking about micro-benchmarking. You're testing one

23 small function, and it is often the case that you make

24 one small function way faster, and then you try it in the

25 context of a larger application, but it turns out it was

15:16:22

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1 function and you invoke it at the beginning of every
2 other function. So any function that takes an array and
3 a start position and an end position, you know, you want
4 to check that the start and end are in balance. So
5 you'll do that by calling a function, a method to 15:31:04
6 validate the arguments, and that would appear to be the
7 purpose of this RangeCheck function.

8 Q. The RangeCheck function that we're looking at
9 on page Google 551599 did not come from Tim Peters' list
10 sort for Python; correct? 15:31:20

11 A. C does not have exceptions. So it most
12 certainly did not.

13 Q. And the RangeCheck at 551599 in TimSort is
14 the same code as the RangeCheck for comparable TimSort at
15 551226; correct? 15:31:47

16 A. Probably so because the two files are copies
17 of one another, and it's a judgment call under those
18 circumstances whether you want to copy this identical
19 code. Assume -- yeah, it's identical. So, you know,
20 your choices are to either copy the code or to make the 15:32:02
21 function package private instead of private and call it
22 from one file to the other. Lesser of two evils.

23 And in this case, given that one file is a
24 copy of the other, copy the whole thing.

25 (Exhibit 210 was marked for identification.) 15:33:09

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1 Q. BY MR. JACOBS: Exhibit 210 is a printout of
2 arrays.java, copyright 2004, Sun Microsystems.

3 Do you see that?

4 A. I do.

5 Q. And you are listed there as an author along 15:33:24
6 with Neal Gafter.

7 Do you see that?

8 A. I do.

9 Q. And so you had worked actually with Neal at
10 Sun and then later together at Google; correct? 15:33:33

11 A. Correct. And for the record, Neal did not
12 write this file. He generified it. I wrote it.

13 Q. And by "generified," what do you mean?

14 A. When generics were added to the platform, he
15 added the generic typed parameters to the method 15:34:07
16 declarations that allow this to be used with the type
17 safety of generics.

18 Q. Did you write it around 2004?

19 A. No.

20 Q. So you see it says there's a version 1.59 15:34:27
21 around 2004. What's the version history of your work?

22 A. This was part of the original collections
23 framework, and the bulk of it was written in 1997.

24 Q. And does it have a -- it does not have
25 TimSort? 15:34:42

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1 A. Now it does. Well, it -- it -- yeah, as of
2 today or yesterday, Oracle did a release candidate for
3 1.7, and that caused TimSort.

4 Q. What do you mean "a release candidate"?

5 A. Release candidate is beyond a beta release. 15:35:06
6 It is what will become the release if no more bugs are
7 discovered in it.

8 Q. And by 1.7 you mean Java SE?

9 A. Seven.

10 Q. So if you turn to the 24th page of this 15:35:31
11 document to --

12 A. Is this document page numbered?

13 Q. It is not. And you look at -- and look for
14 RangeCheck.

15 A. I'm not finding it. 15:36:37

16 Q. It is --

17 A. Can you tell me something else on the same
18 page?

19 Q. Yes. Searching.

20 A. Oh, you've got it? Excellent. 15:36:55

21 Q. So in this Sun code, arrays.java, you wrote
22 the RangeCheck function; correct?

23 A. Yes.

24 Q. And you wrote it while you were employed by
25 Sun? 15:37:17

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1 did the integration to simply be able to drop the TimSort
2 function in and have the calls to RangeCheck simply match
3 up.

4 So I may have copied that signature basically
5 as a favor to the people who were integrating it into 15:44:00
6 OpenJDK and then rewritten the comment and the body. I
7 don't know. I'm speculating.

8 Q. BY MR. JACOBS: So that's actually what I'm
9 asking you. What is -- you are sitting here and
10 inferring from the similarity of the two that that may 15:44:17
11 have happened?

12 A. Yes.

13 Q. My question to you is: What happened? What
14 did you do? And if the answer is you have no
15 recollection, then that's the best testimony that that 15:44:24
16 would be the answer to that question.

17 A. Yes.

18 MR. PURCELL: Object to the form.

19 You can answer.

20 THE WITNESS: Excuse me? 15:44:32

21 MR. PURCELL: You can answer.

22 THE WITNESS: All right.

23 So, you know, I do not recall precisely what
24 I did, but just knowing my habits as a software engineer,
25 I do believe that I would have gone and looked at the 15:44:42

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1 signature of this function.

2 Q. BY MR. JACOBS: Why this -- well, but as you
3 sit here today, you do not have a recollection of doing
4 so; is that correct?

5 MR. PURCELL: Object to the form. 15:45:04

6 THE WITNESS: I do not.

7 Q. BY MR. JACOBS: Do you have a recollection of
8 accessing Sun code while you were working on TimSort?

9 A. I don't have a recollection, but I'm
10 perfectly willing to believe that I did. You know, I 15:45:21
11 think the similarity of the signature, the fact that, you
12 know, the three arguments are in the same order and have
13 the same name, you know, is a strong indication that it
14 is likely that I did.

15 Q. And were there other cases in which you were 15:45:37
16 working on signature similarity where the similarity of
17 the signature was important as -- in your work on
18 TimSort?

19 A. None that I'm aware of, and it seems unlikely
20 that there are any. 15:45:58

21 Q. So why would RangeCheck be the one that
22 requires the signature to be similar?

23 A. Because it is the only piece of functionality
24 that TimSort shares with the remainder of arrays,
25 java.util.arrays. TimSort is a 700 and -- you know, it's 15:46:15

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1 a big long file, and the only functionality that it
2 shares is this little function here, and it is very much
3 in the interest of the users of the new sort that it
4 behave exactly like the old sort. You want it to throw
5 exactly the same exception. You want it to actually emit 15:46:47
6 the same prose. You want that text to be the same.

7 So, you know, it's the one where it makes
8 sense to do it. Everything else derives from Tim Peters'
9 implementation. And, you know, here is a little piece of
10 the interface that is specific to Java that doesn't exist 15:47:12
11 in C.

12 MR. JACOBS: Let me ask you to look at
13 something I prepared and see if you quarrel with it.

14 (Exhibit 211 was marked for identification.)

15 Q. BY MR. JACOBS: 211 is a top over bottom of 15:47:42
16 the arrays.java code we were looking at from the 2004 Sun
17 copyright date -- printout of arrays.java. And the
18 TimSort.java code we were just looking at, which is in
19 Android and which is, in particular, the RangeCheck
20 function in both cases. 15:48:06

21 Do you see that?

22 A. Uh-huh.

23 Q. Are they identical?

24 A. No.

25 Q. What are the differences? 15:48:12

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1 design there, and I know it's something really close to
2 your heart, something you've been working a lot on. So
3 why is it so important? Why are clean APIs so important
4 and what is your philosophy behind creating?"

5 And he was right about that. APIs are 17:25:51
6 something that's close to your heart; right?

7 A. Uh-huh.

8 Q. And you went through in that talk some of the
9 things you went through in your presentation earlier,
10 such as amplify the power of programmers? 17:26:00

11 A. Uh-huh.

12 Q. That's a "yes"?

13 A. Yes.

14 Q. "We don't have to waste time, you know,
15 reinventing the wheel. We can devote our limited 17:26:07
16 resources to actually solving the problems that we have
17 to solve."

18 You said that in that interview; correct?

19 A. I did.

20 Q. And then you talked about bad APIs and how 17:26:17
21 they can be an unending source of pain and --

22 A. Quick question for you, by the way. I don't
23 have a copy of this thing in front of me so I find it a
24 little harder to say yes when I can't see the transcript.

25 MR. JACOBS: This is a copy we prepared 17:26:31

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1 (indicating) from the video.

2 THE WITNESS: Thank you.

3 Q. BY MR. JACOBS: So I'm on page 5 of this.

4 A. Okay. All right. Continue. Reinventing the
5 wheel? 17:26:54

6 Q. Yes. And so I want to focus you on the
7 middle of page 7 and just confirm that you said this.
8 You talk on the bottom of page 6 about the importance of
9 names?

10 A. Uh-huh. 17:27:08

11 Q. And then you say: "It's written once and
12 read and maintained for years so you want to make it easy
13 to read."

14 This is the easy-to-read point that you were
15 getting at; right? 17:27:18

16 A. Yep.

17 Q. "It contains a grammar for the new integer
18 literals which allow you to separate groups with
19 underscores."

20 What are you referring to there? 17:27:27

21 A. This would be the language changes in Java 7.

22 Q. And you said: "I pointed out that unless we
23 change the names of these non-terminals, the grammar is
24 just going to confuse people."

25 Do you see that? 17:27:45

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1 A. Uh-huh.

2 Q. And Jeremy says: "Right."

3 And then you said: "Yes, you know, generally
4 speaking, these aesthetic matters are not just being
5 prissy. They have real dividends if you get them right 17:27:49
6 in terms of, you know, productivity on down the line. If
7 you get them wrong, there is real losses in terms of bugs
8 caused by misunderstandings."

9 Do you see that?

10 A. Yep. 17:28:00

11 Q. And you believe that to be true; correct?

12 A. Yes, for APIs; probably not for non-terminal
13 symbols in grammar. Perhaps I was just being prissy that
14 day.

15 Q. But in general, for application programming 17:28:10
16 interfaces --

17 A. Yes.

18 Q. -- you believe these aesthetic matters are
19 not just being prissy; they have real dividends?

20 A. Absolutely. 17:28:19

21 Q. Just to tie down a few tent flaps here, you
22 had this email exchange with Bob Lee, which was
23 exhibit --

24 A. 220.

25 Q. Thank you. Did you talk with anyone else 17:28:38

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1 about the Oracle lawsuit, other than Mr. Hwang?

2 A. I probably talked to my wife about it.

3 Q. I won't ask you about that.

4 A. Okay. And I talked on lists where Mr. Hwang
5 was one participant and there were other participants. 17:29:03

6 Q. What lists? What lists are those?

7 A. I recall shortly after the lawsuit, we had to
8 decide whether it was possible for us to appear at
9 JavaOne or not, and the lawsuit was discussed in that
10 context. 17:29:29

11 Q. The -- what's the name of that list?

12 A. It doesn't have a name. It was ad hoc. It
13 was just a number of employees.

14 Q. Were you given instructions at any time about
15 how to refer to the Java aspects of Android? 17:29:45

16 MR. PURCELL: And Mr. Bloch, I'd like to
17 caution you not to reveal anything that you might have
18 been instructed to do by counsel. So to the extent that
19 the answer is "yes" with respect to people other than
20 counsel, you can say "yes." 17:30:03

21 THE WITNESS: Okay. The answer is not that I
22 recall.

23 Q. BY MR. JACOBS: Did you at some point
24 understand that Java was a "J word," that Java was
25 referred to as "the J word" on the Android team? 17:30:20

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1 STATE OF CALIFORNIA) ss:
2 COUNTY OF MARIN)

3

4 I, LESLIE ROCKWOOD, CSR No. 3462, do hereby
5 certify:

6 That the foregoing deposition testimony was
7 taken before me at the time and place therein set forth
8 and at which time the witness was administered the oath;

9 That testimony of the witness and all
10 objections made by counsel at the time of the examination
11 were recorded stenographically by me, and were thereafter
12 transcribed under my direction and supervision, and that
13 the foregoing pages contain a full, true and accurate
14 record of all proceedings and testimony to the best of my
15 skill and ability.

16 I further certify that I am neither counsel
17 for any party to said action, nor am I related to any
18 party to said action, nor am I in any way interested in
19 the outcome thereof.

20 IN WITNESS WHEREOF, I have subscribed my name
21 this 13th day of July, 2011.

22

23

24

25



LESLIE ROCKWOOD, CSR. NO. 3462