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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DELL INC.; RIVERBED TECHNOLOGY, INC.;

HEWLETT-PACKARD ENTERPRISE CO.; HP ENTERPRISE

SERVICES, LLC; TERADATA OPERATIONS, INC.; ECHOSTAR

CORPORATION; and HUGHES NETWORK SYSTEMS, LLC,

Petitioner

v.

REALTIME DATA LLC,

Patent Owner

Case IPR2016-00972

Patent No. 7,415,530

DEPOSITION OF KENNETH A. ZEGER, PH.D., taken on behalf of the Petitioner, at 12390 El Camino Real, San Diego, California, commencing at 9:14 a.m. and ending at 2:38 p.m., Monday, April 10, 2017.

Reported by: Audrey L. Ricks CSR No. 12098, CCR, RPR, CLR

Henderson Legal Services. Inc.



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34
1
               Is lossy versus lossless a data type?
2
               Let me retract that. I meant -- data type
          Α
3
    with reference to the compressor, so I will take
    that back.
5
               Let's talk about image data versus speech
6
    data.
7
          0
               Okay. Are there other types of data other
8
     than image and speech?
9
          Α
               Yes.
10
               What other types of data are there?
          Q
11
               There's video, for example.
          Α
12
               Is video different than image data?
13
          Α
               Yes.
14
          0
               Is image data typically encoded using
15
     lossy compression?
               MR. NOROOZI: Objection.
16
                                          Form.
17
               THE WITNESS: Typically, but not always.
18
               And, by the way, when I say "image," I
19
    mean still image.
20
    BY MR. SOMMER:
21
               Something that would be compressed maybe,
          Q
     for example, using jpeg?
22
23
               That's an example, yes.
          Α
24
               Was jpeg available in 1998?
25
          Α
               Yes.
```



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35
               So if somebody of ordinary skill in the
1
    art saw the compression of image data, they might
2
3
    understand that to be compressed using jpeg in 1998;
    correct?
5
               MR. NOROOZI: Objection.
                                         Form.
6
               THE WITNESS: Well, they might learn that
7
    it either was or was not.
8
    BY MR. SOMMER:
9
          0
               What other types of data are there?
10
               There's -- there's text data from, like,
          Α
11
    Word documents. There's e-mail. There's all sorts
    of stuff.
12
               How many different type -- using this
13
          0
14
    understanding of data type that we've been using in
    these questions and answers here, how many different
16
    types of data are there as of 1998?
17
               Probably an enormous number. I don't know
18
    if it's infinite or not, but it could be almost any
19
    number.
20
              Very large number; correct?
          Q
21
          Α
               Yes.
2.2
               Is Claim Number 1 of the '530 patent
23
    limited to the use of any particular data type for
24
    the first data block?
25
               MR. NOROOZI: Objection.
                                          Form.
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36

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1
               THE WITNESS: I didn't specifically study
2
    whether there's a limitation. I didn't need to do
3
    that to analyze the -- the opinions of Dr. Creusere.
4
               I don't know offhand of any particular
5
    limitations. I do know that -- I think the claim is
6
    directed towards lossy -- I'm sorry -- lossless
7
    coding. So I think that would naturally incur
    certain types of data to not be used.
9
               Whether they are, you know, excluded or
10
    limited in the claim, that's another question I just
11
    didn't study. I would have to go back and think
    about that.
12
    BY MR. SOMMER:
13
14
              As you sit here today, you can't say that
         Q
15
    the first data block must be of a specific type of
16
    data; correct?
17
               MR. NOROOZI: Objection. Form.
18
               THE WITNESS: Without further study, I
19
    don't think I would feel comfortable saying it's
    limited to a particular type of data right now
21
    unless, I mean, maybe it's in my report and I'm
22
    forgetting it.
23
               But offhand, I don't see a particular
24
    limitation. There could be. I just would have to
25
    study it in more detail or be reminded and refresh
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