

EXHIBIT 58

ORIGINAL

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARIZONA

MDY INDUSTRIES, LLC,)
)
Plaintiff,)
Counter-Claim Defendant,)
)
-vs-) CIVIL ACTION NO.
) CV 06-2555 PHX DGC
BLIZZARD ENTERTAINMENT, INC.)
AND VIVENDI GAMES, INC.,)
)
Defendant)
Counter-Claim Plaintiffs,)

VIDEOTAPED

DEPOSITION OF EDWARD CASTRONOVA

The deposition upon oral examination of EDWARD CASTRONOVA, a witness produced and sworn before me, Tamara J. Brown, CSR, RMR, CRR, Notary Public in and for the County of Marion, State of Indiana, taken on behalf of the Plaintiff, at the offices of Lewis & Kappes, P.C., Suite 1700, One American Square, Indianapolis, Marion County, Indiana, on the 15th day of January, 2008, pursuant to the Federal Rules of Civil Procedure with written notice as to time and place thereof.

Connor + Associates, Inc.
1650 One American Square
Indianapolis, IN 46282
(317)236-6022

1 can analyze it, but not too many people who have
2 the background that I do in a nuts and bolts
3 social science field. So that's how it
4 happened.

5 **Q** Thank you, that was very thorough.

6 **A** Let me know if you want me to slow down or cut
7 things off. I would be more than happy to.

8 **Q** Okay. I would like to turn our attention now
9 toward the matter at hand. You are obviously
10 aware of the game called World of Warcraft,
11 correct?

12 **A** Yes.

13 **Q** Okay. Can you tell me about your experience
14 with the World of Warcraft game?

15 **A** Sure. World of Warcraft was released in
16 November 2004. I had the benefit of playing it
17 from an early stage. It was clear from early
18 press releases that this was going to be a big
19 game. Nobody knew if it was going to be a big
20 hit. There was a big competitor coming out at
21 the same time called EverQuest 2, so I made
22 accounts of both those games and played them --
23 and pretty quickly started to level more rapidly
24 in World of Warcraft and put more time into it
25 than the other one.

1 So between, I'd say, late 2004 and November
2 2008, early 2007, I would say World of Warcraft
3 was the main game that I played for fun and
4 enjoyment. And I played it with -- there are a
5 lot of professors who play, a lot of people in
6 the game industry who don't work for Blizzard
7 play that game.

8 So I would estimate that I have in World of
9 Warcraft maybe 15 or 20 characters above level
10 10. My highest level character is a level 48.
11 And I've played on player versus player servers,
12 role playing servers, player versus environment
13 servers, so all the different server types, all
14 the different races, all the different classes,
15 just for fun.

16 **Q** What is your understanding of what the game
17 does?

18 **MR. GENETSKI:** Objection, vague.

19 **A** What is my understanding of what the game does.

20 **Q** Or maybe --

21 **A** It provides entertainment.

22 **Q** Well, let me ask you, I mean, a little bit more
23 specifically.

24 What exactly is your understanding of the
25 object of the game?

1 **MR. GENETSKI:** Objection, vague.

2 **A** That, the object depends on the player. What's
3 the object of that piece of paper? It depends
4 on who's reading it.

5 So I think from the designer's perspective,
6 the purpose is to make money. And the way they
7 make money is by --

8 **Q** No. Can I just stop you? I didn't mean from
9 the designer, I meant what is your understanding
10 of what, how the game is played, or what -- I
11 don't want to make this sound too complicated, I
12 just want to know what do you think or -- strike
13 that.

14 What is your understanding of what the
15 World of Warcraft game is about? Maybe that's a
16 better question. And maybe it's not.

17 **MR. GENETSKI:** Objection, vague.

18 **A** I can talk about research that's been done,
19 about why people play these games. Is that the
20 kind of --

21 **Q** No, no, no, I mean what is the game, what are
22 the, what is the object of the game? What are
23 the rules of the game? That's, I don't want to
24 make this sound too complicated, I just...

25 **A** There is no victory condition. So if we were

1 talking about Monopoly and you said what is the
2 object of the game of Monopoly, I would say the
3 object is to make more money than the other
4 players and make them all bankrupt, be the last
5 player standing.

6 World of Warcraft is not a game like that.
7 It does not have a posed victory condition. So
8 that's why I keep reverting to either the
9 objective of the people designing it, why they
10 designed it, or the people playing it, what they
11 see as the point of their own playing.

12 It's less a pure game than a game
13 environment. And in the game environment there
14 are many objectives that are placed in the
15 sandbox, and it's up to the player to decide
16 which objectives to pursue.

17 I could go through a list of what those
18 kinds of objectives are, and what typical
19 players seem to be pursuing in this kind of
20 game, World of Warcraft, and others. Would that
21 be helpful?

22 **Q** Yes, please.

23 **A** So, research has shown that there are something
24 between four and six different player types.
25 One player type is called the explorer. And an

1 within reason there are at least five or six
2 large groupings of people that have different
3 objectives.

4 The problem of the designer is to create an
5 environment that satisfies as many of these
6 people as possible.

7 **Q** Okay. I would assume I'm correct in stating
8 that the World of Warcraft game has an economy.

9 **A** Yes.

10 **Q** Okay. Can you tell me a little bit about what
11 the economy in World of Warcraft is like?

12 **A** Sure. When you speak about any economy, you
13 have to talk about exchanges between people,
14 okay. And so the economy in World of Warcraft
15 involves some players getting things that they
16 don't particularly need, and needing some things
17 they don't have, and other players having
18 balancing needs; and then they exchange.

19 The way exchange happens is through the
20 auction house. So let's say I'm a wizard, and I
21 get a magic piece of heavy armor. Wizards don't
22 wear heavy armor. I have no use for it. I do,
23 however, need magic wands. I don't have a magic
24 wand right now. So I go to the auction house, I
25 put my heavy armor up for auction in an

1 environment that looks very much like eBay, and
2 then I, you know, hopefully that sale goes
3 through.

4 When the sale goes through, the software
5 transfers the breast plate to the person who
6 bought it and transfers the gold to me. Then I
7 can use the gold to bid on magic wands that I
8 want. So that's player-to-player trading. It
9 is an integral part of the World of Warcraft
10 experience.

11 It's energized through a currency that
12 World of Warcraft designers have made. And the
13 way the currency works is what you call a
14 faucet/drain system. So when you kill a
15 monster, you get gold pieces; and when you
16 complete a quest, sometimes, you get gold
17 pieces. That's the faucet stuff coming in.

18 And then when you acquire certain services
19 from the game, there's a drain of the gold going
20 out. So when I do an auction, let's say,
21 there's a little auctioning fee. That goes into
22 Blizzard, and it's basically a drain out of the
23 player economy. When I buy a flying mount,
24 that's nine thousand gold pieces or something,
25 all that money drains out.

1 And all of this is designed by Blizzard,
2 obviously, with the gold maximizing player
3 satisfaction.

4 So nobody wants to be in an economy holding
5 on to goods that are worthless. So they try and
6 set it up so that all the classes and all the
7 races at all levels acquire items that have some
8 value in the player economy. They try to make
9 sure that all the players have services that
10 they can sell, useful contributions to make.

11 And in order to make that happen,
12 obviously, they have to make all the players
13 have some sort of demand in this economy; they
14 have to have things they don't have but need.
15 And they have to make sure the currency is
16 stable, sound, healthy; making a reasonable
17 economic environment.

18 **Q** So it's fair to say that the economy in World of
19 Warcraft has very similar qualities to the real
20 life economy; is that true?

21 **A** There are some similarities and some dramatic
22 differences.

23 Take, for example, the structure of work.
24 The structure of work in the real world involves
25 most people work for companies that are owned by

1 shareholders or by individuals. In the World of
2 Warcraft economy, everybody is self-employed.
3 So if I want to make money in World of Warcraft,
4 I go out and I harvest ore and I sell it on the
5 auction house; self-standing, self-employed
6 person. Maybe I'm a tailor, and I buy linen on
7 the auction house, and I turn it into robes, and
8 I sell the robes. There aren't any
9 corporations.

10 However, so, okay, so corporate form is
11 different, form of employment is different, but
12 there's still labor supply, there's still supply
13 and demand. All of those theories carry over
14 with basically no modification to the game
15 economy.

16 **Q** Okay. Are you aware of my client's program
17 called Glider?

18 **A** Yes, I am.

19 **Q** Can you tell me about your experience with this
20 program?

21 **A** Sure. After being hired as an expert witness in
22 this case, I was advised to try it out. And so
23 I spent a couple of afternoons running Glider on
24 one of my characters. You know, I purchased the
25 program, and I ran it, and tried to exploit as

1 this, but it's also explicitly against the
2 contract that you agreed to when you play. So
3 it's also cheating in that sense.

4 **Q** Okay. I'll come back to that part in a minute.

5 **A** Sure.

6 **Q** You said the first time that you played Glider
7 was after you were contacted by the attorneys in
8 this case?

9 **A** Yes.

10 **Q** And when was that?

11 **A** When did they contact me?

12 **Q** Okay. When did they contact you?

13 **A** Early summer, I think.

14 **Q** Of '06? I'm sorry, of '07?

15 **A** I'm actually not clear on when exactly I was
16 first contacted. It had to have been late '06
17 or early '07.

18 **Q** Summer of '07?

19 **A** Long time ago.

20 **Q** Okay. So you said shortly after you were
21 contacted, that's when you purchased a Glider
22 key?

23 **A** Yeah. Again, I'm not clear on exactly when I
24 purchased it.

25 My feeling is that it was in the fall. It

1 wasn't like immediately after they contacted me.
2 It was later in the process as we were talking,
3 you know, we decided it would be smart for me to
4 actually play Glider.

5 **Q** And you said you played it for several hours.

6 **A** Yeah.

7 **Q** And do you remember exactly how many or
8 approximately how many?

9 **A** On one -- okay, so I can think of two
10 sessions -- one was three to four hours, and the
11 other was more like one or two. I think my
12 first session was one or two, and the second one
13 was three or four.

14 **Q** So for a total of approximately five to seven
15 hours maybe?

16 **A** Yeah, um-huh, yeah.

17 **Q** Any other time other than that?

18 **A** Not with Glider, no. I would say, however, I
19 don't think it takes a whole lot of time to
20 understand what the program does.

21 **Q** Okay.

22 **A** My sense of bots in general is, the idea is,
23 especially with Glider is, you're supposed to be
24 able to figure out how to use it rapidly. And I
25 feel like I got 70 to 80 percent of the service

1 of the program working very, very quickly.

2 That's part of the appeal.

3 **Q** So you said the longest time that you had ever
4 played World of Warcraft using Glider at any one
5 time was at most three to four hours?

6 **A** Um-huh, yeah.

7 **Q** Okay. So you've never used it for a stretch of
8 time greater than 24 hours?

9 **A** No, certainly not.

10 **Q** Okay. And you said that you did this on two
11 separate occasions. Do you remember when the
12 last time that you used it?

13 **A** January -- I would say October. That's my
14 sense, October.

15 **Q** October. That's of '07, right?

16 **A** Yes.

17 **Q** Do you, as of the most recent time that you used
18 Glider, approximately in October of '07, are you
19 aware of generally what the program features of
20 Glider are?

21 **A** Yes. I was aware of them before I used it,
22 became familiar with them as I used it.

23 **Q** To the best of your recollection, can you tell
24 me what those are?

25 **A** So, what Glider allows you to do is you specify

1 a character, so you launch the Glider program,
2 then you launch World of Warcraft. Within
3 Glider you set up something known as a glide.
4 And a glide is a series of instructions to the
5 software about what to do with the character.

6 The way you do this is you take your
7 character to the area where you want him to
8 farm, the word farm meaning, you know, extract
9 experience points and resources, and you press a
10 button that basically starts, Glider starts
11 recording what you are doing.

12 And you sort of, you run in a circle, and
13 as you go along you kill monsters, and Glider is
14 recording, like, okay, the character is supposed
15 to go here, here, here, here, here. Then when
16 you get back to the start of the circle, Glider
17 says, okay, recording stopped.

18 Then you set some switches in terms of, you
19 know, do you want the character to run back to a
20 merchant and sell things? And if you do, then
21 you have to run that path. And it records the
22 path of the merchant.

23 Do you want the character to come back from
24 the graveyard if he gets killed for any reason;
25 then you go to the graveyard and back.

1 So what you have told Glider is you've
2 given it information about where you want the
3 character to run around, and some idea of how it
4 should respond to various things in the
5 environment.

6 You can also then set switches for how to
7 respond to people who come by, you know,
8 whether, what to do when you're -- what items to
9 pick up. Let me think of some of the other --
10 and then as I mentioned before, with respect to
11 specific classes, how do you want a warlock to
12 respond to this situation; and if you're a
13 rogue, do you want to use this ability or that
14 ability. So it allows you to tell it and record
15 all these features of how you want it to play.

16 And then you just press, I think a button
17 that says glide, and you walk away from your
18 machine and it follows the path that you gave
19 it, killing monsters along the way with the
20 protocols you told it to do.

21 **Q** Okay. I would like to hand you what I would
22 like to have marked as Exhibit No. 1, something
23 I'm sure you're very familiar with.

24 *(Deposition Exhibit 1 was marked for*
25 *identification.)*

1 experience.

2 From what I have seen, though, from looking
3 at Glider's forums and the Marquis Dragon web
4 site, it is possible for someone to run, let's
5 say, a mage for three days straight. That's a
6 verbatim quote from a guy named Rabid Dog, who
7 in the video says, "The best character for
8 farming gold is a mage. I have run mine for
9 three days straight."

10 So I think normal usage for a product like
11 this is intense. It's not going to be the four
12 hours that I did. I mean, once you get it
13 going, you let it go.

14 My guess is normal usage would be to set it
15 up in an area, let the thing run for however
16 many hours it takes to sort of exploit that
17 area, and get as many experience points as you
18 can out of it, then change the switches a little
19 bit, move to a different area, and continue with
20 that.

21 So I would say normal usage is probably
22 turn it on, let it run for four, five, six,
23 seven, eight hours, however many, change the
24 switches a little bit, and let it run again. In
25 my view that's virtually a 24-hour a day

1 of accumulating experience points and levels,
2 which in turn leads to a significantly shorter
3 subscription period for Glider users."

4 A Yes.

5 Q As a general matter, what evidence do you have
6 to support that statement?

7 A So the evidence that I referred to already: My
8 experience with the Glider program, my
9 understanding of how Glider works, what it does,
10 and my understanding and expertise on what game
11 players do with a program like Glider; all of
12 those things lead overwhelmingly to the
13 conclusion that people who use Glider will get
14 through the levels more quickly than those who
15 don't. That is the stated objective of the
16 Glider program.

17 Q But again, in terms of your own personal
18 experience, you've only played the game with
19 Glider for about five to seven hours, correct?

20 A And in that five to seven hours, I accumulated
21 experience points without playing the game. So
22 if you want to look at that evidence, in five to
23 seven hours instead of gaining zero experience I
24 gained, you know, several thousand experience,
25 which is a very, very high percentage increase

1 over, you know, not using Glider, in that period
2 Glider contributed immensely to my experience
3 point gain.

4 **Q** If you were playing the game without Glider,
5 isn't it safe to assume you would have also
6 accumulated experience points as well?

7 **A** But that's not the comparison that's of
8 interest, right? The comparison of interest is
9 not between me sitting there playing the game,
10 moving my character around, and me sitting there
11 playing the game moving my character around and
12 having Glider installed. The comparison is
13 between me playing the game and me not playing
14 the game and Glider is playing the game for me.

15 So if that's the sense, I mean that's a
16 clear sense in which Glider accelerates
17 experience point accumulation. If I'm not
18 playing the game, XP accumulation is zero. If
19 Glider is playing it for me, XP accumulation is
20 positive.

21 **Q** I think maybe what I would like to do is just
22 ask you in terms of comparing you as a player
23 playing the game versus you playing the game
24 with Glider.

25 **A** Maybe what we should do is expand the time

1 be an acceleration effect there.

2 But for the sake of argument, let's say
3 there is no acceleration effect. There
4 certainly is acceleration in the leveling up to
5 that.

6 **Q** But it's also true, though, that once a
7 character gets to level 70 using Glider, I mean,
8 they could speculatively stay a Glider or World
9 of Warcraft customer indefinitely, correct?

10 **A** Just as much as someone who doesn't use Glider
11 could.

12 **Q** Right, exactly.

13 **A** So I'm saying those, that part of the argument
14 doesn't seem especially relevant to the question
15 of, you know, the amount of time somebody is
16 paying money to Blizzard.

17 **Q** I think what I'm trying to understand from you
18 is, there's, there are people who will play
19 World of Warcraft who will spend time getting to
20 level 70.

21 **A** Sure.

22 **Q** And then perhaps some of them may play above
23 level 70 for a certain period of time and quit.

24 **A** Sure.

25 **Q** And that period of time may be a short period of

1 time.

2 A Could be.

3 Q There are also people that could get to level 70
4 very quickly, but then could stay around after
5 level 70 for quite a long time.

6 A Sure.

7 Q And I guess what I'm asking you is how do we,
8 how do we determine what constitutes a shortened
9 subscription time for Blizzard, when it's
10 possible that you could have either of those
11 combinations occur?

12 A Well, I don't think it's relevant in any kind of
13 an aggregate social science question to say,
14 well, you know, there's this case that could
15 happen, and there's that case that could happen.
16 I think what you have to do is look at the
17 overall impact, the average, right?

18 And so what is the average impact of
19 Glider? On average, it speeds up leveling. On
20 average, it at least does not slow down time at
21 level 70. I think it actually speeds up time to
22 level 70 as well.

23 So while there may be individuals who
24 process through Glider and World of Warcraft at
25 different rates and with different objectives,

1 believed that more oranges will appear in their
2 refrigerator? My answer is going to be yes,
3 there might be people who do that.

4 **Q** But I think -- I'm not trying to -- yeah, no, I
5 understand what you're saying. I'm not trying
6 to ask you --

7 **A** Here's why it is a problem: It's a problem
8 because you don't make judgments about a macro
9 social phenomenon by focusing on individual
10 cases. You have to look at what the aggregate
11 of those things are.

12 **Q** No, but I think you'll agree with me that there
13 are certainly a lot of factors why people will
14 play. And there are also a lot of factors of
15 actually how people use the program, correct?

16 **A** Sure, of course.

17 **Q** And it's, you have to look at all of those
18 factors, not just one of those factors, correct?

19 **A** Sure, yeah. Maybe that's the essence of my
20 argument. Putting all those factors together, I
21 think the compelling evidence is that the time
22 to level gets shortened by anybody who's using
23 Glider, just because of the nature of the
24 program.

25 But I don't see any reason, any offset of

1 lot of experience points and a lot of gold;
2 probably not at that level, but they're doing
3 something.

4 **Q** Okay. Turn to page 5 of your report. I think
5 it's the last sentence of the first full
6 paragraph. You state that, "In fact, Blizzard
7 has registered more than 300,000 user complaints
8 that specifically reference bot usage."
9 Correct?

10 **A** Um-huh.

11 **Q** Are you aware of how many total complaints
12 Blizzard has received about all, about all
13 things that they could complain about?

14 **A** I don't know the specific number.

15 **Q** Do you know how many of those complaints that
16 you referred to in your report complained -- or
17 I'm sorry -- actually quit using World of
18 Warcraft because of bot programs?

19 **A** I, no, I don't know any data that specifically
20 relate 300,000 user complaints to people
21 actually quitting the game.

22 What I do know is, based on research and
23 experience in this area, that when people are
24 upset with the game, there are two or three
25 effects on revenues. One is, as you refer,

1 people quitting the game. So everything I know
2 about people running these games indicate that
3 when an issue comes up that a lot of people
4 complain about, that issue needs to be resolved
5 or people will quit the game. So this is just a
6 known and general fact in this industry.

7 Secondly -- so that's quitting -- secondly,
8 it is a known and understood fact that when a
9 game acquires a reputation for things like
10 cheating, dupes, exploits, hacks, bots,
11 automated play, it becomes known among potential
12 game players that this isn't a very good game,
13 it is not a fair game, so they are less likely
14 to sign up.

15 And the third thing that doesn't really
16 come out in this report, but I would like to
17 stress this, when economists look at a demand
18 curve -- I'm trying to do this from the
19 standpoint of the viewer. Here's the demand
20 curve. Here's the supply curve. When demand
21 weakens because a game has cheating in it, let's
22 say, here's this intersection movement that
23 involves people quitting the game or people not
24 subscribing.

25 But there's more to it than that. There's

1 also a general decline in people's willingness
2 to pay. As demand moves, the willingness to
3 pay, the overall revenue that the company gets,
4 is also affected. That revenue effect applies
5 not to people who are quitting, not to people
6 who are signing up, but all the people who
7 continue to play the game.

8 So Blizzard has a very lengthy portfolio of
9 products and services that it can provide. You
10 know, certainly it provides the game service for
11 about 15 bucks a month. But it can offer sales
12 on that, you know, holiday sales; it offers
13 people the ability to change their names for a
14 fee; it offers people the ability to change what
15 server they are on for a fee. All of these are
16 revenue streams.

17 And anything that impedes the atmosphere of
18 the game, or distorts the economy, makes it a
19 worse game, makes it boring, is going to affect
20 their ability to extract revenue from their
21 existing player base. And the model, we'll
22 probably talk about it later, has that as one of
23 its driving assumptions, which is a classic and
24 accepted demand effect from within economics.

25 So these 300,000 complaints are a hard

1 nugget of data that sort of light up that entire
2 area of economic theory and calculation, and
3 says if those people are complaining, it means
4 that Glider is doing something bad to the game
5 and causing people to quit, yes, people not to
6 subscribe, yes, but also major weakness in
7 Blizzard's ability to collect revenues from all
8 of its sources, major differences in the
9 willingness to pay.

10 **Q** Well, with regard to the 300,000 complaints, I
11 think you mentioned that they were relative to
12 bots.

13 **A** Yeah, user complaints that specifically say
14 there are bots in this game, and it makes me
15 angry.

16 **Q** Okay. How many of those complaints dealt with
17 Glider usage? Are you aware of that?

18 **A** I'm not aware of how many.

19 **Q** So if you don't know how many people were
20 actually complaining about Glider, you don't
21 actually know how many people would have quit
22 the program because of Glider; is that a safe
23 assumption?

24 **A** I think the evidence is overwhelming that Glider
25 is the leading bot. It is the king of the bots

1 I also don't think it's relevant. The
2 question here is whether or not the existence of
3 this program causes damages. The question is
4 what would the sign-ups be in the absence of
5 this program.

6 And, you know, you went through a lengthy
7 list of the example of the income tax code and
8 people thinking it's unfair. People actually
9 can quit the tax code. They can do things like
10 tax evasion.

11 And studies that I have seen, from back in
12 the day when I was doing primarily cost/benefit
13 analysis, indicate people do respond to their
14 perceptions of fairness in the income tax code
15 by increasing the amount of tax evasion that
16 they do, moving capital overseas, for example.

17 So to say that there, that this unfairness
18 doesn't cause any impact on Blizzard's bottom
19 line, is really at odds. And in fact, you keep
20 coming back to this assertion that, you know,
21 it's really all about folks quitting, and again,
22 I would say it's not just about people quitting,
23 there are effects both on Blizzard's revenues
24 and its costs.

25 Revenue effects include people potentially

1 actually left the program, left using World of
2 Warcraft, because of bots?

3 A I know that 300,000 people have registered
4 complaints about this.

5 Q Okay.

6 A And I understand from my expertise that those
7 complaints will result in people quitting,
8 people not signing up, and a general lack of
9 willingness to pay for the Blizzard product.

10 Q Okay. And with regard --

11 A The specific numbers on that, we don't have.

12 Q Okay. But if you don't know the specific
13 numbers of how many people have quit, left the
14 game, or never signed up for the game because of
15 what my client's program does, then what in
16 fact, if the number of people that actually have
17 multiple accounts is greater than the number of
18 people who actually have quit the game, wouldn't
19 the net effect then be that Blizzard has
20 actually made more money?

21 MR. GENETSKI: Object to the form.

22 A Yeah, let me think about that. So the
23 speculation here is Glider users open up so many
24 new accounts after being, let's say, banned,
25 that it dominates the number of new accounts or

1 person who, let's say, opens a second account
2 because of Glider, let's say for every person
3 who does that, there are five million people in
4 North America and the EU who are potentially mad
5 about botting in World of Warcraft. And in
6 terms of aggregates, that one account for that
7 person gets swamped by the anger of five million
8 other people.

9 Every time I have done a cost/benefit
10 analysis, those aggregate effects always swamp
11 these, you know, a few new accounts.

12 **Q** But with regard to this case, you haven't done
13 any, any scientific study to show that, correct?

14 **A** That's not true at all. I mean the model that I
15 put forward uses established and recognized
16 methods for doing exactly this sort of
17 simulation study.

18 So, you know, you assume that some
19 behavior, whether it's, you know, pollution or
20 theft, or in this case cheating in a game, has
21 some negative consequence on the people who use
22 the game. And then you simulate, under
23 plausible parameters, what those effects would
24 be. That's an accepted method.

25 **Q** But in terms of the actual numbers, I mean,

1 can't you at best speculate as to what those
2 numbers would be in terms of the actual?

3 A Yeah, what we've done, I think what I have done,
4 and, you know, respecting what the rebuttal
5 expert has done, is, we have done what
6 economists do and cost/benefit specialists do.
7 We have a little dispute about what the right
8 parameters are. The right parameters put a
9 bound on the numbers.

10 And, you know, I think what's important for
11 a court to understand is, you put a bound on
12 those numbers, zero is not in those bounds.
13 Okay, the fact that we're not able to reduce
14 this to a single specific number with some, with
15 a study, all right, that fact or that argument
16 does not imply that this number when we've
17 discovered it is going to be zero. All right.
18 Those are two separate arguments. One argument
19 would be that there are no damages. Another
20 argument is, well, we're not sure what the
21 damages are.

22 If you pulled off a watch and put it on the
23 table, you know, and it has a price tag on it,
24 that would be sufficient to establish what the
25 worth of the watch is. But if you just put a

1 watch down there, I'm going to have a sense of
2 what it's worth even if there's no price tag.

3 So formal empirical studies are great.
4 They are sufficient for establishing damages.
5 But in the literature on cost/benefit analysis,
6 it is very common, normal, and accepted
7 scientific procedure to develop a compelling
8 model, simulate that model with plausible
9 parameters, and use that to put bounds on the
10 effects.

11 And I don't think there's any way to go
12 through that protocol without coming up with
13 bounds that indicate there is some substantial
14 damage to Blizzard from the existence of Glider.
15 I don't think there's any way to cut this animal
16 and not come up with that answer.

17 **Q** Okay.

18 **A** The rebuttal expert and I can disagree about,
19 it's high, it's low, but zero is not in there.

20 **Q** Okay. You also state on page 5 that, "It is
21 difficult for another user to confirm that
22 players gaining levels at an accelerated pace
23 are botting, so the average player concludes
24 that either he must be an incompetent player or
25 the system is balanced against him. Either way,

1 really, two assumptions; one is the assumption
2 that they are using it to try to level up a
3 character?

4 A Okay.

5 Q And I don't think you'll get any disagreement
6 that that's what my client advertises the
7 program to do.

8 A Okay.

9 Q But the second one, I think, is what I'm more
10 interested in discussing with you. You say that
11 Glider users use this program to farm gold.

12 A Yeah, and resources.

13 Q Where do you get that information from?

14 A Well, okay. So there's a couple of places.
15 First of all, within the program itself, all
16 right, there's a switch, for example, for do you
17 want to run back to the merchant to sell the
18 junk loot that you have picked up and turn it
19 into gold pieces. So the existence of that
20 switch in the program indicates to me that
21 certainly the program has envisioned that as
22 something you can do.

23 Secondly, I think it would be a strange
24 person who would set Glider to accumulate
25 experience points and not accumulate gold. All

1 right. It's like -- it's not like -- what you
2 would have to do -- and I don't know if you can
3 do this with Glider -- say, go in and kill
4 monsters but don't loot them, you know, don't
5 try to acquire, and if you acquire any gold
6 pieces, destroy them, drop them on the ground.
7 I don't think Glider would even let you do that.
8 So it's like you don't even have a choice of
9 whether or not you're farming gold and
10 materials. It happens as part of the program.

11 And the third reason why I think Gliders
12 use it to farm gold is because of the existence
13 of people who brag about using Glider to farm
14 gold. I mean, there are people who, this Rabid
15 Dog guy I mentioned earlier, who bragged on
16 YouTube about, you know, being able to run a
17 mage three days straight and farm 30 gold an
18 hour, and look at how much money you make. And
19 you look at the ads around the site, and it's
20 like, you know, "Easy way to get World of
21 Warcraft gold, use WoW Glider." So...

22 **Q** Well, in the universe of Glider users, do you
23 know how many people actually use the program
24 primarily to farm gold?

25 **A** That's speculation. But I would say given how

1 exceed 20 million dollars per year.

2 **A** Right.

3 **Q** And is there, is there a spreadsheet that you
4 can simply plug in these variables and churn out
5 the number 20 million in terms of a model?

6 **A** Actually, yeah, the model that I developed, it
7 could absolutely be used for that purpose. So
8 the rebuttal report, for example, proposes some
9 numbers. The guy didn't get it exactly right.
10 But I was actually working through them after I
11 got them.

12 If you take my model and plug in his low
13 ball numbers that he determined, and do them
14 right, you still get five million a year. So
15 it's like this model does exist, and the
16 parameters can be, you know, you can debate what
17 would be the right parameters, what's the right
18 amount of response.

19 And so to the extent that the rebuttal
20 expert has addressed these issues and used this
21 model, I'm reasonably confident about his use of
22 it, and I, you know, would be more than happy --
23 let's say we were at a conference -- to discuss
24 with him, well, your number is not right, you
25 should use this number. But the model is