

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

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LIBERTY MUTUAL INSURANCE CO.

5 Petitioner

6 v.

7 PROGRESSIVE CASUALTY INSURANCE CO.

8 Patent Owner

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10 \_\_\_\_\_  
Cases CBM2012-00002; CBM2012-00004 (JL)

Patent 6,064,970

11  
Case CBM2013-00004 (JL)

12 Patent 8,090,598

13 Cases CBM2012-00003; CBM2013-00009 (JL)

14 Patent 8,140,358

15  
16 \_\_\_\_\_  
17 DEPOSITION OF MARY LOU O'NEIL

18 Washington, D.C.

19 Friday, September 13, 2013

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22  
23  
24 Reported by: John L. Harmonson, RPR

25 Job 65806

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2 disagreement.

3 Q. Now, would you agree with me that the  
4 term "rating factor" is commonly used with  
5 reference to actuarial classes?

6 MR. MYERS: Objection. 402, 403.

7 A. There is a term "rating factor"  
8 utilized in the current classification system.  
9 However, it is not the same as "rating factor" as  
10 referenced in the patent.

11 Q. Is the term -- Well, what do you mean,  
12 the term is utilized in current classification  
13 systems?

14 A. In the current classification system,  
15 which is described, I don't believe the '358  
16 patent goes into detail, but it is described in  
17 more detail in the '970. The current system  
18 describes several rating characteristics, risk  
19 characteristics, such as age, sex, marital  
20 status, and so on. The standard class plan  
21 utilizes those. And I believe it comes up with  
22 possibly 260 or so cells of people that are  
23 classed -- might be classed in. So there is a  
24 lengthy description of that.

25 And so how do we price an insured

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2 using that system? We would -- we could have a  
3 premium for each of those cells, but as I  
4 mentioned earlier, because of the fact that the  
5 data by each little cell are not analyzed all the  
6 time to come up with a different premium in that  
7 particular cell in particular, for convenience  
8 sake a single classification is taken as a base,  
9 and it's usually like the adult driver. And all  
10 the other prices are related to that. And it's  
11 sort of a classification relativity.

12 But any rate manual, which is the  
13 thing the agent uses to price a policy, will call  
14 those rating factors because they are used to  
15 rate or price the policy. And so for convenience  
16 sake, for the agent's use, for publication of the  
17 rate manual, all of the cells were ratioed to the  
18 base class.

19 So now the insurance company only has  
20 to publish new base rates. They don't have to  
21 publish a price for each class every time they  
22 issue the rate manual to the agent.

23 Q. So under the system you described, the  
24 rating factor is a numerical value assigned for  
25 each particular classification that's used in

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2 calculating the insurance premiums; is that  
3 right?

4 MR. MYERS: Objection. 402, 403.

5 A. I wouldn't characterize it that way.  
6 That's why I tried to explain it the way I did.

7 It's which comes first. Okay? In  
8 this case, those ratios or class plan  
9 relativities are second. The prices for the two  
10 classes are first. And all classes have been  
11 related to one class for purposes of expense  
12 saving and not republishing your entire rate  
13 manual every time, for simplicity and other  
14 reasons.

15 So they happen to be labeled probably,  
16 but maybe 50 years ago, as a rating factor  
17 because they were used to rate the policy. It  
18 had nothing to do with anything technical about  
19 it. And basically they express relationships  
20 between a particular class and the base class.  
21 So they are not calculated directly. They're  
22 just a ratio of two prices.

23 And so I hope that's clear. That was  
24 my explanation.

25 Q. Well, I didn't understand your last

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2 answer when you said that they aren't calculated  
3 but they're a ratio. Isn't the ratio calculated?

4 A. Well, all right. I guess if you want  
5 to call it that, yeah, it's calculated in that  
6 respect. It's a ratio.

7 Q. Now --

8 A. Let me clarify. I meant that it  
9 wasn't a direct calculation. Like for a  
10 particular cell we didn't go and like indirectly  
11 make calculations of those numbers. Everything  
12 is a ratio. That's what I meant.

13 Q. So is that the way, the way you just  
14 described, that the auto insurance companies with  
15 whom you have worked actually go about assigning  
16 rates?

17 MR. MYERS: Objection. 402, 403.

18 A. Yeah, I'm not sure what you mean by  
19 that question. I'm sorry.

20 Q. Well, you just described a procedure  
21 in which rating factors are used in coming up  
22 with rates for a whole universe of people. I'm  
23 just asking whether in your experience that's the  
24 way insurance companies go about doing that.

25 A. Well --

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2 requirement to have expected claims losses.

3 Q. In the sense of no necessary  
4 requirement to look at historical claims data; is  
5 that the --

6 MR. MYERS: Objection. 402, 403.

7 A. There was the possibility of obtaining  
8 data from other sources.

9 Q. But you don't regard that kind of data  
10 as expected claims loss data?

11 A. It may or may not be expected claims  
12 loss data. I don't know what other data I might  
13 find available.

14 Q. Can estimated claims loss data be  
15 expected loss data?

16 A. I guess I'm not understanding that  
17 question. In what context are you speaking?

18 Q. Well, I'm trying to understand what  
19 you envision by expected claims loss. And my  
20 question is simply whether an estimated claims  
21 loss can serve as expected claims loss data.

22 A. You might be able to use such data,  
23 but it's not necessary to use or to have that  
24 data, is what I'm saying.

25 Q. But it would qualify in your mind as

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2 expected claims loss data, whether you used it or  
3 not; is that right?

4 A. It could be actual, it could be  
5 expected, it could be from some other source.  
6 But again, it's not necessary to use any kind of  
7 claims loss data, is what I'm saying. No matter  
8 what adjective you put in front, you don't really  
9 need to use claims loss data.

10 Q. Let's look at page 20 -- excuse me,  
11 Paragraph 20, 21, 22 and 23 of your declaration,  
12 your rebuttal declaration that is. For the  
13 record, that's Liberty Exhibit 1032.

14 A. How far up did you go?

15 Q. 20 through 23. Okay?

16 A. Yes. I've taken a look at those  
17 quickly.

18 Q. Okay. So am I correct that your  
19 opinion as expressed in these paragraphs is that  
20 the '650 application does not inherently disclose  
21 rating factors?

22 A. Correct. That is my opinion. I do  
23 not see that in the '650.

24 Q. And that's because you believe a  
25 person of ordinary skill in the art could

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2 conclude that the '650 application contemplated a  
3 direct calculation of insurance costs?

4 MR. MYERS: Objection. 402, 403.

5 A. That is what I stated here in  
6 Paragraph 23. There is no specific mention of  
7 utilization or calculation of rating factors.  
8 Therefore it could be concluded that a direct  
9 calculation was intended.

10 Q. In your experience working and  
11 consulting as an actuary involved in setting  
12 premiums or reviewing rate submissions based on  
13 actuarial classes, did you ever have a situation  
14 where such a direct calculation of insurance  
15 premiums was done?

16 A. I guess -- I guess I'm not relating to  
17 what you're saying in terms of a practical  
18 specific thing. I'm relating to this in terms of  
19 what I would do given the information presented  
20 in the '650. And I'm thinking, okay, the '650  
21 presents using monitored data to price insurance.  
22 I don't know how many classes I would have and so  
23 on. And so there's no reason to think that I  
24 might not be able to calculate it directly. I  
25 have no reason to believe I couldn't. That would

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2 be the best calculation because then you would  
3 have the most data.

4 Q. So although the '650 -- excuse me,  
5 although rating factors were in common usage  
6 during the relevant period in time, you would not  
7 have believed that the '650's disclosure of  
8 calculation of premiums relied on the use of  
9 rating factors?

10 MR. MYERS: Objection. 402, 403.

11 A. Your question had two disparate parts  
12 to it. In the beginning of the question you  
13 refer to rating factors in common use. Those  
14 were what we identified earlier as the  
15 relativities labeled as rating factors. They  
16 were not the same as the rating factors in the  
17 '358.

18 So to say that this '650, oh, yeah, we  
19 would assume that, no, we wouldn't, because now  
20 we have a whole new system presented based on  
21 monitored data. Why would we assume that we're  
22 going to relate something back to the adult  
23 driver class, because that's what the old rating  
24 factors or relativities did. They just took  
25 stuff and related it back to the base price. So

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2 agent utilizing it firsthand, is in my book  
3 chapter, that illustration.

4 What you just asked me I believe was a  
5 question as an actuary, how would I determine the  
6 original price for those hundred risk  
7 characteristics that in the intersection would be  
8 an enormous number of classes.

9 Q. So it depends on who you're talking to  
10 how to answer that question?

11 A. Well, more than that. It depends on  
12 what you're trying to derive. Are you deriving  
13 the initial premium by cell or are you  
14 deriving the -- or has that already been done and  
15 are you just -- they are rating a specific policy  
16 for a specific insured in a specific  
17 classification cell?

18 Q. And if I'm doing the latter, what  
19 you've just described, I would use rating factors  
20 in conducting that calculation as you've  
21 described in your book; is that correct?

22 A. Not necessarily. That's the current  
23 way it's been done in the past using the rate  
24 relativities right there in the chapter. That's  
25 describing the past procedure. A future

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2 procedure could be totally different.

3 Q. Isn't what you've put in your book the  
4 typical way it's done?

5 A. That's the past procedure, though,  
6 whereas the patents speak of something new. And  
7 I believe you asked me about something new.

8 Q. Are you aware of any insurance company  
9 that uses the direct calculation approach that  
10 you describe in Paragraph 23 rather than the  
11 rating factor approach that you've described in  
12 your book?

13 MR. MYERS: Objection. 402, 403.

14 A. I still think we're confused about  
15 perspective. Okay? What I describe here in my  
16 declaration is the perspective of the actuary.  
17 Okay? The actuary is setting price.

18 What's described in the book is after  
19 the actuary already did that. The prices are  
20 there. Relativities between two prices or all  
21 the prices have been derived based on one  
22 specific selected class. And now we have a  
23 person utilizing that information to come up with  
24 a premium for a specific policy.

25 So we're at different places in the

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2 calculation, so both are used. This procedure  
3 I've described in my declaration is used  
4 internally by an actuary. That procedure is used  
5 externally by agents.

6 Q. Let's look at another paragraph of  
7 your rebuttal declaration, Ms. O'Neil.  
8 Paragraph 25. Do you have that?

9 A. Yes.

10 Q. So I think you also for purposes of  
11 this have to look at Mr. Miller's declaration,  
12 Exhibit 2005, at Paragraph 43.

13 A. 43, you said?

14 Q. 43, right. Because you're commenting  
15 here about that paragraph of his declaration. Do  
16 you have that?

17 A. Yes, I do.

18 Q. Okay. So you see Mr. Miller here is  
19 quoting from a passage of the '650 patent which  
20 reads:

21 The method is comprised of steps of  
22 monitoring a plurality of raw data elements  
23 representative of an operating state of a vehicle  
24 or an action of the operator. Selected ones of  
25 the plurality of raw data elements are recorded

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2 when they are determined to have an identified  
3 relationship to the safety standards. The  
4 recorded elements are consolidated for processing  
5 against an insured profile and for identifying a  
6 surcharge or discount to be applied to a base  
7 cost of automobile insurance.

8 Have I read that correctly?

9 A. Yes, you have correctly read that  
10 quote.

11 Q. Okay. That quoted language which  
12 mentions identifying a surcharge or discount  
13 applied to a base cost of insurance is referring  
14 to multiplying the surcharge or discount against  
15 the base cost of insurance, isn't it?

16 A. That's -- I don't believe that's my  
17 reading of that. Could you say that again,  
18 please? I'm sorry.

19 MR. WAMSLEY: Could you read it back?  
20 (Whereupon, the requested portion was  
21 read back by the Reporter.)

22 MR. MYERS: Objection. 402, 403.

23 A. I don't believe so. I believe  
24 surcharges and discounts are dollar values.

25 Q. When you see the word applied to a