IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the *Inter Partes* Review of U.S. Patent No. 7,797,717

Trial No.: IPR2013-00164

Issued: September 14, 2010

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Inventors: John Christopher Harvey, *et al.*

Assignee: Personalized Media Communications, LLC

Title: SIGNAL PROCESSING APPARATUS AND METHODS

REBUTTAL DECLARATION OF CHARLES J. NEUHAUSER, Ph.D. UNDER 37 C.F.R.§ 1.68

I, Dr. Charles J. Neuhauser, do hereby declare:

1.   I am making this rebuttal declaration at the request of Zynga, Inc. in the matter of the *Inter Partes* Review of U.S. Patent No. 7,797,717 ("the '717 Patent.")

2.   I am being compensated for my work in this matter at my standard hourly rate of $375 for consulting services. My compensation in no way depends on the outcome of this proceeding.

3.   I previously submitted a declaration in support of the Petition for *Inter Partes* Review filed by Zynga, Inc. on February 26, 2013 (Exhibit 1012, referred to herein as "Neuhauser I").

4.   This declaration is in rebuttal to the Patent Owner Response (Paper No. 15) (referred to herein as "PMC Resp.") and the Declaration of Samuel H.

Russ, Ph.D. (Exhibit 2019) (referred to herein as "Russ Decl.") both filed on October 25, 2013.

I.   Anticipation by Humble

5.   As set forth in Neuhauser I, claims 1, 2, 3, 4, 5, 6 and 9 of the Harvey '717 are anticipated by Humble (4,825,043) and therefore are unpatentable.

A.   Claim 1:

(i)   Humble Discloses "Generating a Benefit Datum in Response to the First Control Signal by Processing Subscriber Specific Data."

6.   With respect to the second element of claim 1, I have identified the *"first control signal"* as signal 30 from the UPC scanner and the *"subscriber specific data"* as the particular UPC code scanned[1] [Neuhauser I, ¶112, ¶114, respectively]. PMC suggests that I have identified the same aspect of Humble, namely the signal received over line 30, to show anticipation of both *"first control signal"* and *"subscriber specific data"* [PMC Resp. p.9]. Dr. Russ makes a similar argument at Russ Decl. ¶¶66-70.

7.   There are, in fact, two aspects to the signal 30 that is provided by UPC scanner 12. There is the presence of the signal, which indicates that an item has been scanned and, in addition, there is the content of the signal that indicates the

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[1] Alternatively, I identified the "subscriber specific data" as the total product purchased [Neuhauser I ¶114].

UPC code associated with the particular item that was scanned. Although the signal 30 may be a single electrical signal, it contains both of these aspects, namely, a presence that signals the start of an action (i.e. indicating that something has been scanned) and the contents of the signal, which defines the product scanned. In this case the presence of the signal indicates that a UPC bar code has been scanned so that the comparator of '717 Figure 2 may begin operation, and the data contained in signal 30 indicates the particular UPC code, which may or may not correspond to the stored UPC codes 48, 50, 60 and 62. Humble makes this clear at 1:16-22 where the action of the checker (i.e. passing the item over the scanner) causes generation of the signal, which contains the actual UPC code scanned:

> Typically, the checker passes the article over a universal product code (UPC) scanner. The UPC is thus read and a digital signal indicative of the code is furnished to a computer whose memory includes such identification and price data in storage in address correspondence with the code signal. (Humble, 1:16-22.)

8. Further, at 3:52-61 Humble describes that the "sensible codes" of the scanned products are detected and then used to compare against stored codes. Thus, clearly showing that there is a difference between the presence of an information transmission, which functions here as a "control signal" and the data

contained within that signal, which is the product code and corresponds to the "subscriber specific data".

In its method for the checkout of products bearing sensible codes indicative and for the promotion of related products, the invention provides the steps of storing codes indicative of preselected of the products for use in such promotion, storing for display promotional messages concerning products, detecting sensible codes of purchased products, comparing such detected codes of purchased products with such stored codes, and displaying the stored promotional messages selectively in accordance with the results of such comparison. (Humble 3;52-61.)

9.   In describing the system at 1:47-57, Humble teaches that the checkout system is "responsive" to UPC signals provided by the scanner. One of ordinary skill in the art would understand that the system is responsive to the presence of the UPC signal on line 30 for example, and that it uses the data contained within this signal to determine what action, if any, to take.

The display unit is furnished with information from a system responsive to UPC signals provided by a scanner. Such system discerns selected products selected for purchase from such UPC signals, such products being those in connection with which a promotional plan has been preestablished, either for such products or other products. The system then provides information implementing the promotional plan to the display

4

unit, which may be customer-interactive for the dispensing of coupons of the like. (Humble 1:47-57.)

10. At paragraph 68 Dr. Russ says: *"That is, the personalized advertising promotion in Humble is not selected in response to the UPC signal by processing the same UPC signal"*. However, that is exactly what is happening. Once the UPC signal is received then the comparison can take place. Without responding to the reception of the UPC code how would the comparators (e.g., 40) know when to undertake the comparison of the data that signal 30 contains? Unless they respond to the affirmative presence of the signal they would respond, perhaps erroneously, to partial UPC codes or even to received noise. The section from Humble at 1:16-22 that I have cited above clearly indicates that line 30 "furnishes" a signal indicative of the UPC code for the product. It can do this because the signal represents both the fact that a product has been scanned and that it had a specific UPC.

(ii) Humble Discloses "Receiving... Information Transmission At Said Receiver Station."

11. In its response PMC asserts that the "information content" (i.e. product price and descriptive information) is not received "at said receiver station" as required in the first element of claim 1 [PMC Resp., p. 16]. Dr. Russ makes a similar assertion at ¶57 of his declaration because he apparently believes that "information transmission" can only be received from an external source, such as

transmission stations shown in some of the preferred embodiments of the '717 patent. [*See also*, Exhibit 1019, Deposition Transcript of Samuel H. Russ, pg. 254, line 3 – pg. 255, line 3.]

12.   However, claim 1 of the '717 patent does not place any restrictions on how a "receiver station" making use of the method obtains the *"information content"*. There is no reason why this *"information content"* could not be received from some other part of the *"receiver station"* or from some source external to the *"receiver station"*. The only requirement is *that the information content and the control signal must be received in an "information transmission at said receiver station"* One of ordinary skill in the art would recognize just from looking at Humble Figure 1 that the product price and description information on lines 18 and 20 are received by UPC Data Buffer 24 and by POS display 22, because transmitting and receiving information within a processor based system, such as Humble, is a basic engineering concept.

13.   Furthermore, even the language within claim 1 itself demonstrates that information can be received "at said receiver station" because the fourth claim element requires "receiving subscriber input at said receiver station" [287:30-31]. Consider, Example #9 – Exotic Meals of India, which is one of the preferred embodiments of the '717 [see generally, 241:46-245:32]. In this example, in response to a prompt from the television broadcast, the subscriber may enter a

sequence of characters at their Widget Signal Generator and Local Input (i.e. Local Input 225, which is a keyboard). This information is "transmitted" from local input 225 to controller 20. Both of these components are identified in Figure 7 as part of the "ultimate receiver station". Thus, one of ordinary skill in the art would understand directly from claim 1 that information can be transmitted and received internally within a "receiver station". However, if they needed further clarification then simply reviewing the Exotic Meals of India example would demonstrate that this was the proper way to understand the claim:

> Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a [sic] your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information the you see on your screen." The information that appears on the screen of each subscriber is "TV567#".

> Each subscriber – in particular, the subscriber of the station of FIGS. 7 and 7F, said second subscriber, and said third subscriber – enters TV567#, in a fashion well known in the art, at the keyboard of the specific local input, 225, of his own station which causes said input, 225, to transmit a particular preprogrammed process-local-input instruction and said TV567# information to the controller, 20, of the signal processor, 200, of said station.

Receiving said instruction and information causes the controller, 20, at each station where TV567# is entered, in a predetermined fashion, to retain said TV567# information at particular last-local-input-# memory. (Harvey '717 Patent, 242:58 – 243:9)

14. The specification of the '717 patent is replete with similar examples. Figure 1, the exemplary figure of the patent, is described generally at 10:40 to 11:24 and teaches transmitting and receiving signals between various components within the receiver station of Figure 1. For example, microcomputer 205 is described as receiving and processing information bearing signals from TV signal decoder 203 [see, e.g., 10:53-11:6]:

One is inputted continuously to TV signal decoder, 203, and the other to microcomputer, 205. TV signal decoder, 203, which is described more fully below, has capacity for receiving a composite video transmission; detecting digital information embedded therein; correcting errors in the received information by means of forward error checking techniques, well known in the art; converting the received information, as may be required, by means of input protocol techniques, well known in the art, into digital signals that microcomputer, 205, can receive and process and that can control the operation of microcomputer, 205; and transferring said signals to microcomputer, 205. Microcomputer, 205, is a conventional microcomputer system with disk drives that is adapted to have

8

capacity for receiving signals from decoder, 203; for generating computer graphic information; for receiving a composite video transmission; for combining said graphic information onto the video information of said transmission by graphic overlay techniques, well known in the art; and for outputting the resulting combined information to a TV monitor, 202M, in a composite video transmission. (Harvey '717 patent, 10:53-11:6)

15.   Other discussion in the specification related to the "receiver station" of Figure 7 also teaches the internal transmission and reception of information bearing signals. For example, a laser disk player and a record player are included as part of the "other input apparatus" 252 that can provide transmissions to the "receiver station" of Figure 7 and yet are clearly part of the receiver station.

Input apparatus include satellite earth station, 250, satellite receiver circuitry, 251, converter boxes, 201 and 222 (by means of which the station of FIG. 6 receives the multiplexed multi-channel cable transmission of the cable head end station of FIG. 6), antennas, 298 and 299, and other input apparatus, 252 (which may be, for example, a laser disc player or a record player); and the subscriber station of FIG. 4 has capacity for receiving wireless programming transmissions (for example, at a satellite earth station, 250, and satellite receiver circuitry 251), a multi-channel cable transmission (for example, at converter boxes, 201 and 222), and locally transmitted input

9

(for example, at other input apparatus, 252). (Harvey '717 patent, 202:11-22)

16.   Later in the description of Figure 7 at 203:12-23 the matrix switches 258 and 259 are described as communicating "information transmission" among station apparatus. One of ordinary skill in the art would recognize this description as supporting the notion that "information transmission" can be transmitted and received entirely within the receiver station.

> Two matrix switches, 258 and 259, communicate the programming and SPAM message/control information transmissions among station apparatus. Matrix switch, 258, is a conventional matrix switch, well known in the art, with capacity for switching programming transmissions of television, radio, and other forms of electronically transmitted programming. Matrix switch, 259, is a digital matrix switch, well known in the art, with capacity for switching binary information transmissions. By means of matrix switch, 259, all apparatus communicate control information and the information of SPAM messages that have been detected in programming transmission. (Harvey '717 patent, 203:12-23)

17.   Perhaps PMC and Dr. Russ believe that there is a difference in the "receiving at" limitation in the first and fourth element of claim 1 as they seem to imply [see, e.g. PMC Resp., pp. 17-18 and Russ Decl. ¶¶60-63]. The only point of difference would be that the first element includes the notion of an "information

transmission". However, as I pointed out above in the preferred example of Exotic Meals of India, the subscriber input characters are clearly an "information transmission" originating at the "Widget Signal Generator and Local Input" device. It is unclear what the "Widget Signal Generator and Local Input" of this description is. Surely, it includes a Local Input 225 as illustrated in Figure 7. However, one of ordinary skill in the art would understand that the Local Input 225 might also be a "remote keyboard", such as that described with respect to a "receiver station" of the prior art at '717 Patent, 4:4-13. This is related to the cited prior art of Bourassin (US Pat. No. 4,337,480), in which the keyboard is a conventional remote control. The local input 225 of the '717 patent is either wired or wireless, but in any case the information it provides is received "at a receiver station". Further, such reception must be an "information transmission", just as required in the first claim element, as this is what one of ordinary skill in the art would understand. Thus, one of ordinary skill in the art would certainly understand that signals generated by various components of the "receiver station" are received "at" the receiver station, just as the first and fourth claim elements require and further that they are "information transmissions".

18. During his deposition, Dr. Russ indicated that based on his review of the '717 Patent, there is no discussion of receiving an information transmission at a

receiver station where the transmission originates within the receiver station, and that this was a basis for his interpretation of the claim term "receiver station":

> Q. Are you saying that, based on your review of the Seven One Seven patent specification, there is no discussion of receiving an information transmission at a receiver station where that transmission originates within the receiver station?
>
> A. I believe that's correct.
>
> Q. Is that an important basis for your interpretation of the term "receiver station"?
>
> A. That is one basis.

[Exhibit 1019, pgs. 277-278.]

19.   As demonstrated by the numerous examples set forth above, it is my opinion that Dr. Russ is incorrect in his conclusion that there is no discussion in the '717 Patent of receiving an information transmission at a receiver station where that transmission originates within the receiver station.

20.   With respect to the notion of an "information transmission", PMC and Dr. Russ appear to believe that this term must be interpreted as a transmission included within a carrier wave [PMC Resp. p. 19-20; Russ Decl. ¶¶62-63]. In their response PMC argues that a "television program transmission" describes "a single transmission enveloped within a single carrier wave" [PMC Resp., Pp. 19-20]. I disagree. First, it is my understanding that this definition was provided by Court of Appeals for the Federal Circuit with respect to a different patent. But more

importantly, claim 1 is not related to a "television program transmission", only to an "information transmission". Whatever characteristics are ascribed to a "television program transmission" simply do not apply to claim 1, which speaks more broadly of an "information transmission" that is unrestricted in its characteristics. Whether or not Humble makes use of carrier waves is irrelevant to what one of ordinary skill in the art would understand about claim 1.

21. Further, based on his deposition, it is not apparent that Dr. Russ even reviewed the Federal Circuit's decision or the relevant patent before adopting the Court's inapplicable interpretation of a "television program transmission":

> Q. In Paragraph 62 of your declaration, you refer to a claim construction issued by the Court of Appeals for the Federal Circuit.
>
> In preparing your declaration, did you review that opinion?
>
> A. I don't recall. I know that I reviewed the specific term that's quoted there. I don't recall how much of the rest of the opinion that I reviewed.
>
> Q. What patent was the Court of Appeals for the Federal Circuit construing in that opinion?
>
> A. I don't recall, as I sit here today.
>
> Q. Are you aware what claim that the Federal Circuit was construing in that opinion?
>
> A. I don't recall right now.
>
> Q. Did you study the claim?

A. Well, I don't know, since I don't remember which claim it is.

Q. Did you review the file history of the patent being construed in that case?

A. No, I did not.

[Exhibit 1019, Deposition of Dr. Russ, pg. 304.]

22. PMC argues at page 14-16 that "information content" is not received by the system of Humble. Dr. Russ's arguments in support of PMC position can be found in his declaration at ¶¶ 53-56. In my initial declaration, I identified the "information content" as the price and product description data store in UPC data store 16[2] (Neuhauser I, ¶112). Clearly this information is present in the system of Humble, because it is stored in the UPC data store 16. One of ordinary skill in the art would understand that this information can only be in the UPC data store 16 if it was received from someplace, for example, from the owner of the system through an appropriate input device. One of ordinary skill in the art would recognize that this might be done in a number of ways, but ultimately for the information to reside in the UCP data store it must be received. Dr. Russ does not dispute this:

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[2] In Neuhauser I the item number of the UPC data store is given as 26, but the actual item number is 16 (see Humble, Fig. 1)

14

Q. In an application such as Humble, would one of skill in the art, ordinary skill in the art in 1987, have understood that product description information about or correlated to particular bar codes would need to be placed in the point-of-sale terminal?

A. The person of ordinary skill in the art would understand that there has to be data in the data store, but he would understand that there is a variety of mechanisms that the data could get there.

Q. Would he have understood that the data that was in the data store would have to include price information and product description information.?

A. Well, I suppose the answer is yes, although I'll note it is specifically called out in the patent specification.

Q. What would one of ordinary skill in the art in 1987 have understood about the need to at times update price and product description information in point-of-sale terminal?

A. Well, he would, or she would have to understand that some sort of mechanism for updating I guess would be necessary.

[Exhibit 1019, Deposition of Dr. Russ, pages 282-283.]

23. Claim 1 of the '717 patent places no restrictions on the reception of the "information content" other than that it must be in "at least one information transmission". There are no restrictions in claim 1 or expressed in the specification on how the "information transmission" must be accomplished. Further, there is no restriction, as PMC and Dr. Russ seem to imply, that the

15

transmission come from some other station or that it have some special characteristic [PMC Resp., p. 15-17, Russ Decl. ¶¶ 54-56]. There is no requirement that the price and product description stored in UPC data store be received in a transmission from another station as PMC and Dr. Russ seem to imply. For example, Dr. Russ in proposing an alternative method of loading the UPC data store 16 proposes that the price and product description representing "information content" might be loaded from a floppy disk sent through the mail (Russ Decl. ¶56). That is certainly one possibility, but the system of Humble would still be receiving the price and product description in a *"transmission"* because it would be receiving the information from the floppy disk drive and its associated electronics.

24.   In his deposition, Dr. Russ again acknowledges that price and product information may be loaded into Humble's UPC data store 16 from a floppy disk. Dr. Russ argues, however, that loading data into a data store from a floppy disk is not receiving the data in a transmission because, in his opinion, the floppy disk drive is part of the same computer system:

> Q. So the floppy disk drive would read the magnetic regions on the floppy disk? Is that what would happen next?
>
> A. Well, the disk drive, which is part of the computer, would be used to copy data from one part of the computer, the floppy disk, to another part of the computer, the data store.

[...]

Q. But before you actually start to copy, you get the package with the floppy disk in it, you open the package, you remove the floppy disk, and you insert it into the computer, correct?

A. I agree that those steps are performed, but I would not call that an information transmission.

Q. Would you call it a receipt?

A. I would call it the computer copying data from one part of the computer to another.

[Exhibit 1019, Deposition of Dr. Russ, pgs. 284-285.]

25. I respectfully disagree with Dr. Russ' overly narrow interpretation of an "information transmission" to exclude data received from a floppy disk or other similar means. One of ordinary skill in the art would not understand an "information transmission" to have such an overly restrictive definition. This is especially true in view of the specification of the '717 Patent, which discloses that programming (i.e., an information transmission) may be delivered by "any means including over the air, hardware and manual means." [*See* Harvey '717 Patent, 7:12-14.] From his deposition testimony it is clear that Dr. Russ did not consider this teaching from the Harvey '717 Patent when formulating his overly restrictive claim interpretation:

Q. Column Seven, could you read aloud the sentence that spans Lines 12 to 14?

A. The sentence begins "the programming may be"?

Q. Probably. I don't have a copy of it here.

A. "The programming may be delivered by any means including over the air, hardware and manual means."

Q. So does the Seven One Seven patent contemplate delivery of television programming by manual means?

A. It looks like that sentence is saying that programming can be delivered by manual means.

Q. What do you interpret it to mean by "manual means," for delivery of programming?

MR. SCHREINER: Objection, scope.

THE WITNESS: Well, that programming can be delivered by manual means.

BY MR. TOUTON:

Q. Can you give an example of what would be comprehended in the "manual means" it's referring to here?

A. Oh, I don't know. I have not thought about that.

[Exhibit 1019, Deposition of Dr. Russ, pgs. 289-290.]

(iii) Humble's Checkout System is a "Receiver Station"

26. PMC and Dr. Russ also argue that "information content" cannot be received from an "information transmission" that occurs within a *"receiver station"* [PMC Resp. 17-19, Russ ¶¶57-63]. Related to this argument is an unreasonably restricted notion of what a "receiver station" is or could be. This is an issue that I have addressed above (see paragraphs 11-16). One of ordinary skill

18

in the art reading claim 1 of the '717 patent with reference to the specification would not believe that "receiving information content" would be restricted to receiving information content from some external place. There is simply nothing in the claim language itself that expresses this notion. The claim only speaks about the action of "receiving" and does not limit where that information could be received from. It also does not place any technical limitation on the form or mechanism by which the information content is received. To assume otherwise would be to contradict the teaching of the '717 as show in the preferred embodiments.

27. One of ordinary skill in the art thinking in the broadest reasonable terms would surely see internal transmission and reception of information as meeting the broad language of claim 1. For example, information provided at a keyboard is clearly "received" by a personal computer whether a keyboard is physical attached by a wire or incorporated into the case of the personal computer. Personal computers were widely available in 1987 and I see nothing in the claim 1 that would exclude personal computers as a receiver station, and certainly not under a broad and reasonable interpretation. In fact, one of the preferred embodiments of the '717 patent is expressly based on the use of an IBM personal computer ['717 Fig. 1, item 205; 11:6-12]. The system of Humble is nothing more than a highly specialize computer system. Transmitting and receiving information

between subsystems, like the UPC scanner 12, is what computer based systems do and how they would be understood by those of ordinary skill in the art in 1987. Although at ¶61 of his report Dr. Russ proposes that "information content" must be received in a transmission from an external source, there is nothing in claim 1 that requires this. One of ordinary skill in the art would not understand this from the specification unless they were to assume "receiving" could only occur as the preferred embodiments show. Even then, the '717 patent is clear that receiving could be carried out entirely within a "receiver station" as I have explained above with respect to Figures 1, 7 and the preferred embodiments related to these figures.

28.   As a basic issue PMC and Dr. Russ believe that an "information transmission" cannot be received at a "receiver station" unless it is received from some external source, like a "transmission station" [PMC Resp., pp. 20-21; Russ Decl., ¶¶50-52]. This would be a very restricted notion of what it means to receive an information transmission. Figure 7 for example shows an "ultimate receiver station" ['717 patent, 201:53-58].

> FIG. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of FIG. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons. (Harvey '717 patent, 201:53-58)

29.   Based on this reference one of ordinary skill in the art would understand the "receiver station" to be everything shown in Figure 7. At 201:35 to 204:55 the '717 patent describes a number of aspects of this preferred embodiment of a "receiver station". This includes receiving "transmissions" from various apparatus shown, including "other input apparatus" 252, which may be a laser disk player or even a record player. ['717 Patent, 202-11:22]. Clearly in this description the laser disk player, for example, is part of the receiver station and further inputs its received information to the matrix switch [see, e.g. '717 patent 202:23-25]. This is an operation that is entirely internal to the ultimate receiver station and yet is still characterized in the '717 patent as receiving information:

> Input apparatus include satellite earth station, 250, satellite receiver circuitry, 251, converter boxes, 201 and 222 (by means of which the station of FIG. 6 receives the multiplexed multi-channel cable transmission of the cable head end station of FIG. 6), antennas, 298 and 299, and other input apparatus, 252 (which may be, for example, a laser disc player or a record player); and the subscriber station of FIG. 4 has capacity for receiving wireless programming transmissions (for example, at a satellite earth station, 250, and satellite receiver circuitry 251), a multi-channel cable transmission (for example, at converter boxes, 201 and 222), and locally transmitted input (for example, at other input apparatus, 252). (Harvey '717 patent, 202:11-22)

30.   Furthermore, the '717 speaks directly of "information transmissions" being communicated among station apparatus, for example at 203:120-23:

> Two matrix switches, 258 and 259, communicate the programming and SPAM message/control information transmissions among station apparatus. Matrix switch, 258, is a conventional matrix switch, well known in the art, with capacity for switching programming transmissions of television, radio, and other forms of electronically transmitted programming. Matrix switch, 259, is a digital matrix switch, well known in the art, with capacity for switching binary information transmissions. By means of matrix switch, 259, all apparatus communicate control information and the information of SPAM messages that have been detected in programming transmission. (Harvey '717 patent, 203:12-23)

31.   These short discussions, related only to the ultimate receiver station, would certainly inform one of ordinary skill in the art that "information transmissions" could be "received" within a "receiver station, which would clearly be receiving "at a receiver station". Even without referring to the specification of the '717 patent one of ordinary skill in the art would understand this because transmitting and receiving information within systems is a basic aspect of the structure of computer based systems, such as that shown in Figure. 7. For example, all persons of ordinary skill in the art understand that peripherals in a

processor system are connected by buses that transmit and receive information within the system.

B.   Claim 3:

(i)   Humble Discloses That "Subscriber Input Modifies Said Subscriber Specific Data"

32.   With respect to my application of Humble to Claim 3, PMC argues that the scanning of additional items does not modify the subscriber specific data [See PMC Resp. pp. 22-24; Russ Decl. ¶¶83-85]. In Neuhauser I [¶114] I note that the *"subscriber specific data"* may also be the total volume of product purchased. In identifying this aspect of Humble, I made reference to Humble [3:16-34], which describes various scenarios under which a promotion plan pre-programmed into the system of Humble might present coupons or offers with respect to a particular product (in the example, the purchase of Brand X pea soup). One of ordinary skill in the art would see that the example involving purchase volume would be referring to the total purchase of Brand X pea soup as this is a basic operation in check-out counter systems, one which even people not of ordinary skill in the art are familiar with:

> In a more specific example of a promotional plan implemented by the invention, assume that the customer has selected Brand X pea soup and that product is part of the promotional plan. The UPC for this product is pre-entered in the system UPC monitor and comparison is made of it and the

scanned UPC. The result will be positive and the memory may first provide on display 26 an advertisement in the form of a computer generated graphic message or a repeat of a network type advertising message generated from a video disk. The customer might be rewarded with a coupon upon touching such as the item price, also displayed, or by contact with any preselected portion of the display screen. Alternatively, the memory might display promotional information respecting another Brand X soup type, or other product. Depending upon the purchase volume of the Brand X pea soup, the promotional scheme might offer the consumer a free purchase thereof. (Humble, 3:16-34)

33. Given that the system of Humble is clearly able to support at least one promotional scheme based on the volume of a customer's purchase of a particular product, it is clear that a number or volume of a particular product purchased must be a form of "subscriber specific data", and given that products are scanned one at a time it would be equally clear to one of ordinary skill in the art that this action "modifies subscriber specific data" as required by claim 3. Dr. Russ appears to recognize this when he says: *"It is not clear what the 'purchase volume' is. At best, this describes that if the Brand X pea soup volume has been purchased by the customer multiple times at the store, then the customer may get a coupon to get the item for free."* [Russ Decl. ¶84] That seems exactly right and surely includes the

case where the multiple purchases of the Brand X pea soup occur during the same check out session.

34.   At ¶84 Dr. Russ seems to believe that a person making a purchase at the checkout counter system of Humble is not a *"subscriber"* because they do not actually pass the item across the scanner. This seems to be a highly restrictive notion of what a *"subscriber"* is or could be, far beyond what one of ordinary skill in the art would understand. Clearly the customer is responsible for what gets scanned and would be quite upset if the checker were to begin scanning other items that they did not plan to purchase. Of course, store management would be equally upset if the checker were to just place item in the grocery cart without scanning them.

C.   **Claim 4:**

    (i)   **Humble Discloses an "Information Content Comprising a Commercial"**

35.   With respect to claim 4, PMC appears to believe that product price and description information as displayed to a customer in the system of Humble would not comprise a "commercial" [PMC Resp. pp. 24-29; Russ Decl. ¶¶87-89]. One of ordinary skill in the art thinking in a reasonably broad way would understand that a commercial would simply be information about a product or service.

36.   PMC offers a much more restrictive definition of a commercial as "an advertisement or other information designed to induce a purchase" [PMC Resp. p.26]. This is much more restrictive than what one of ordinary skill in the art would believe. However, even this restricted definition would not exclude price and product description from being a commercial because it is clearly information about a product. Further, as even those not skilled in the art are aware, the description of a product is an inducement to purchase. Certainly the price of a product also qualifies as an inducement to purchase because it is common knowledge that price determines whether someone is willing to purchase a product. Thus, even under PMC's definition the price and product description displayed by Humble to the customer would be an inducement to buy. In fact, one of the reasons that a check out system, like that of Humble, displays product price and description is so that customers may cancel or augment their selections based on the price shown to them at the time of scanning.

37.   At ¶87 of his report Dr. Russ argues that product price and description cannot be a commercial because they are not inducements to buy. He further argues that the user of the system of Humble has already selected the articles for purchase and presumably would not be influenced further by any further display of product price and information. However, this does not even conform to the experience of people who are not of skill in the art. Many people, myself included,

watch the price and descriptions of products as they are displayed. Sometimes we find that the price being scanned is different from what we expected and we might make a decision not to buy the product, or perhaps to buy an additional unit of the product based only on the price we see at the checkout. Sometimes the product is within reach at the checkout counter and we can act immediately on that information.

38.   As far as I can see PMC and Dr. Russ do not offer any definition of a "commercial" other than that a commercial is an inducement to purchase a product or service. The limits proposed by Dr. Russ on the meaning of "commercial" appear to be attempts to limit the meaning of the term to one or more of the preferred embodiments [Russ Decl. ¶¶88]. Dr. Russ seems to be saying that a commercial must be something similar to a television spot (i.e. as in the Farm Plans of Europe embodiment), and thus cannot be only the price and description of a product or service. I disagree. A spot commercial on television could simply be a static presentation of the price and description of a product or service. In such a case it would be no different from the product price and description shown on the display of a system of Humble.

D.   **Claim 7:**

     (i)   **Humble in Combination with Lemon Discloses Delivering "Based on a Schedule"**

39.   In the system of Humble there is no specific detail about how product price and descriptive information (i.e. the "information content") and the promotional offers (i.e. the "benefit datum) are delivered to the customers, other than the fact that they are delivered at display 26. I proposed in Neuhauser I that the teachings of Lemon be used to enhance the presentation of this information [Neuhauser I, ¶183]. Lemon is a coupon dispensing station and one aspect of Lemon is that groups of coupons are presented to customers sequentially in a timed sequence [see, e.g., Lemon 10:41-11:5]. This is done because the display is of limited capacity and there may be many coupons to offer:

> As the customer makes selections from the displayed coupons causing a touch screen interrupt (step 120), control of microcomputer 22 is transferred to a background coupon printing command sequence 122 (BPOTSK (FIG. 5)) which causes printer 32 to print and dispense the coupons. If no touch screen interrupt has been received at step 120, control is transferred to an interrogatory command sequence 122 to determine whether the prescribed time for making a selection has elapsed. If so, control is transferred to interrogatory step 124 which causes microcomputer 22 to determine whether the last page of the menu has been displayed. If the time has elapsed and the last page has been displayed, control is transferred to step 126, which causes the transaction to be recorded and return control to the ready sequence. If the last page has not been displayed, but the customer has requested to

28

"quit" selection, (step 128 causes control to be transferred to step 126) where the transaction is recorded and control reverts to the ready sequence awaiting the next transaction.

If at step 122, the prescribed time for making a selection has not elapsed, control is transferred to interrogatory step 130 which causes microcomputer 22 to determine whether the customer has requested the "next page" of coupons. If so, control is transferred to step 132 which causes microcomputer 22 to retrieve the next page data and returns control to step 118 thereby causing the next page to be displayed. On the other hand, if at step 122, the time has not elapsed, and no "next page" request has been made at step 130, control returns to step 120 continuously until a selection is made or the time for selecting expires. (Lemon, 10:41-11:5)

40. The advantage that such a sequential presentation of information has in Lemmon would also apply to Humble. Here the user display 26 is relatively small and the use of the timed scrolling technique of Lemon would allow more information to be displayed to a user, even without their having to interact with the display. For example, the promotional offers could be scrolled in exactly the same way that coupons are scrolled in Lemon. Alternatively, the product price and description information could be scrolled so that a customer could review purchases even when the number of purchases had exceeded the size of the display.

41.   This type of operation, where information on a limited display is scrolled, is familiar to everyone, not just those skilled in the art. For example, airline displays and some older TV program guide displays used this approach. In Lemon this is done for the simple reason that in some situations the amount of information to be displayed exceeds the capacity of the screen. In such cases, the scrolling or successive display technique of Lemon allows a small display to provide all the available information, but on a periodic basis.

42.   Dr. Russ seems to believe that using a scrolling display, as in Lemon, is not providing information content "based on a schedule" because there is no reference to time [Russ Decl. ¶157]. Certainly there are some schedules where there is a reference to time, like a class schedule, or a train schedule. However, a schedule can also describe some repetitive operation where a specific time is not referenced. For example, a shuttle bus that arrives every five minutes might not arrive at a specific time (like 5:17 PM) but passengers certainly understand that it is operating on a schedule.

43.   This display of successive coupon pages, even without user interaction is illustrated in the steps of the flow chart in Figure 7 of Lemon, namely the loop: 118, 120, 122, 124,128, GET NEXT PAGE and 116. This is described in detail in Lemon at 10:41-11:5. This type of display is one that presents

information on a schedule because it makes a new display of coupons available, on a regular basis, even if the user did not make a request for a new display.

44.   Moreover, this type of schedule is recognized within the specification of the Harvey '717 Patent, which describes the playing of a sequence of commercials recorded on a video tape as a "schedule". [*See* Harvey '717 Patent, 171: 32-50.]

45.   PMC and Dr. Russ also assert that there would be no motivation to combine the system taught by Lemon with the system of Humble. I disagree with this notion. The repetitive display of coupons in Lemon is a simple (and well-known) solution to the problem of displaying more information than will fit on a single display screen (i.e. the airline departure display). In the checkout system of Humble even a modest number of purchases would scroll previous purchases off the screen. Using the sequential display technique of Lemon a customer would have the opportunity to review purchases when there was no system input, as would occur after the last item was scanned but before completing the purchase. Dr. Russ expresses the notion that price and product description is somehow different from a collection of coupons [Russ Decl. ¶159]. One of ordinary skill in the art would recognize that there is no difference. Scrolling is used in Lemon because a collection of coupons does not fit on a single screen. However, an

individual coupon does fit on one screen in Lemon, just as price and descriptive information about a particular scanned item would fit on one screen. The problem occurs when all of the coupons or all of the scanned product information does not fit on one screen. At this point scrolling of pages according to a schedule is useful. It would allow a user to review the information related to previously purchased items without explicitly interacting with the screen.

46.   At ¶160 Dr. Russ asserts that there is no motivation to scroll the price and description information about scanned products because the user already has selected the products. However, the common experience of every shopper using such a system is that at least price information about a product is not shown on the product itself because it is not part of the product bar code (UPC). If you are curious about the price of an item your only opportunity to find it out at the checkout line is after it is scanned. Likewise, if an item is part of a sale (say, "two-for-the-price-of-one"), this is something you can also determine at the display. If you are not watching the display when the item is scanned the scrolling feature of Lemon would provide a way to review the price information.

47.   At ¶161 Dr. Russ believes that the display in the system of Lemon will reset if there is no interaction with the display for a period of time and that this would disrupt the function of the system of Humble. I disagree with this also. In the first place, one of ordinary skill in the art could easily drop this feature of

Lemon if it was not useful or applicable. In the second place, even in the system of Humble having the transaction canceled if there is no user interaction with the system for an extended period of time would be useful because it would simply indicate that the transaction was completed or possibly abandoned.

VI. Claims 1-6 and 9 are Rendered Obvious by Lockwood in View of Bakula

48. As set forth in Neuhauser I, claims 1-6 and 9 are obvious over the combination of Lockwood in view of Bakula.

A. Lockwood In View Of Bakula Discloses "Receiving Information Content and a First Control Signal In Said At Least One Information Transmission At Said Receiver Station"

49. With respect to the first element of '717 claim 1, Dr. Russ proposes that one of ordinary skill in the art would believe that a "receiver station" must be a "single machine or device" [Russ Decl., ¶114]. One of ordinary skill in the art would not come to this conclusion, even using the specification of the '717 as a guide. The problem is that saying something must be a single machine or device does not give a clear picture of all the systems and collections of equipment that could be "receiver stations". Even the receiver stations of the preferred embodiments of the '717, such as the systems of figures 3 and 7 ("combined medium receiver station" and "ultimate receiver station", respectively) are complex collections of devices and processors. Further, there are no limitations in

the claim itself or even within the examples provided that would restrict the separation of components in any meaningful manner. Claim 1 speaks about particular actions occurring at a receiver station, but the language of the claim would not tell one of ordinary skill in the art that a receiver station is somehow limited to equipment in one housing, one cabinet, one room or one building, for that matter. One of ordinary skill in the art would not see the physical proximity of devices to be an aspect of claim 1, only that the particular actions must be performed by some assembly called a "receiver station", for example, the assembly of components in Figure 7.

50.   Based on this, one of ordinary skill in the art would see that within the system of Lockwood that terminal A (item 2 of Fig. 1) and central data processing center 22 could be within the same room, or in 1987 within the same set of cabinets. Such an arrangement would certainly be a receiver station under claim 1 because the '717 patent explicitly includes the notion that a "receiver station" could be a home, office, hotel or other type of building ['717 201:53-58] Physical location is unimportant to a broad and yet reasonable understanding of claim 1, which is not about cabinets, rooms or buildings, but about actions to be performed. To impose some physical proximity restriction on the arrangement of a "receiver station" is not reading the claim in a reasonably broad manner.

FIG. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of FIG. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons. (Harvey '717 patent, 201:53-58)

51.   At ¶114 Dr. Russ states that "A receiver station cannot be considered to be multiple computers that are connected by a computer network or phone lines." However, such a restriction would exclude the "ultimate receiver station" of Figure 7, which shows two computers: microcomputer 205 and Signal Processor 200 (Figure 2). The Signal Processor 200 includes a Controller 12, which is described as including a microprocessor itself ['717 patent, 16:48-55]. Thus, even for the preferred embodiment there are separate processors connected together to form a receiver station. Whether or not they use a computer network or remote phone connections, it is clear that the notion of "receiver station" must at least include systems with multiple processors, because the specifically identified preferred embodiment of Fig. 7 does. Further, the processors shown in Figure 7 are connected by a form of computer network, namely, matrix switches (258, 259).

Controller, 12, is a standard controller, well known in the art, that has microprocessor and RAM capacities and one or more ports for transmitting information to external apparatus. Said microprocessor capacity of controller, 12, is of a

35

conventional type, well known in the art, but is specifically designed to have particular register memories, discussed more fully below. Controller, 12, may contain read only memory (hereinafter, "ROM").

Controller, 12, receives the signals inputted from buffer/comparator, 8, and decryptor, 10; analyzes said signals in a predetermined fashion; and determines whether they are to be transferred to external equipment or to buffer/comparator, 14, or both. If a signal or signals are to be transferred externally, in a predetermined fashion controller, 12, identifies the external apparatus to which the signal or signals are addressed and transfers them to the appropriate port or ports for external transmission. If they contain meter and/or monitor information and are to be processed further, controller, 12, selects, assembles, and transfers the appropriate information to buffer/comparator, 14. (Harvey '717 patent, 16:48-65)

52.   . With respect to the notion of a "receiver station" both PMC and Dr. Russ contend that a receiver station could not include a central processor and a remotely located terminal, such as I have proposed in the system of Lockwood [Neuhauser 1, ¶65]. By simply looking at Figure 7, which is but one illustration of a receiver station, one of ordinary skill in the art would understand that a "receiver station" could at least encompass a "home, office, theater, hotel or any other station where programming such as television or radio is displayed to persons"

36

['717 patent,201:53-58]. Clearly, one of ordinary skill in the art would understand at least all of these places to be stations from this explicit description.

53. It appears that PMC is proposing that a "receiver station" have a particular meaning that would be much more restrictive than what one of ordinary skill in the art would understand a "receiver station" to be under a broad and reasonable interpretation. Under the definition proposed by PMC and Dr. Russ [PMC Resp. p. 20-21; Russ Decl. ¶¶59-63] a receiver station must be a device that receives information from a transmission station or some other external source [PMC Resp. p. 20-21; Russ Decl. ¶¶59-63]. The problem is that the notion of an external source is not part of the language of claim 1 and certainly the notion of a "transmission station" is nowhere to be found. Some of the preferred embodiments relate to reception from other stations, but these are only examples. As far as receiving from an external source is concerned, how would one of ordinary skill in the art know what an external source is from claim 1, as this is not part of the claim? For example, how far away does an external source need to be before it is "external"? Does the form factor of the "receiver station" limit what can be an external source, that is, if an information source is built into the station rather than separated from the station by say a few feet? None of this is clear from the language of the claim or from the specification.

54. The illustrated "stations" of the preferred embodiments have a wide range of different architectures and include all manner of components that would separate components by feet, if not hundreds of feet. For example, the intermediate transmission station of Figure 6 has components, such as microwave receiver system 57 that might be hundreds of feet away from other components. The notion of a receiver station as used in the claim is simply too vague to exclude reception from components, such as an input device that might be located only an inch away from the processor. Arrangement or distance between components does not define what a "receiver station" is with respect to claim 1. One of ordinary skill in the art would simply see a "receiver station" as a device, or collection of devices, that is capable of receiving signals whether they are "enveloped in a single carrier wave" or not. This would be in keeping with the notion that I expressed at my deposition that many types of arrangements might qualify as receiver stations because they simply receive signals.

55. PMC also argues that in the combination of Lockwood and Bakula, transmission between the Lockwood terminal 1 and the central data processing center 2 are not transmissions as required by the first element of claim 1 because they occur within what I have interpreted as a "receiver station" [PMC Resp., p. 42]. I have addressed this issue in depth above with respect to Humble. The same

reasoning that I offered above with respect to Humble applies equally to the combination of Lockwood and Bakula.

56.   There is, however, another way to look at the combination of Lockwood and Bakula when the "receiver station" is the proposed combination of the central data processing center (1) and a terminal 2. As I stated in Neuhauser I at ¶153 it is clear that the programming for the central data processing center is "received" at that central data processing center, either through direct loading from a peripheral, such as a magnetic tape or from some remote system. Similarly, the programming that is to be provided to the kiosk terminal 2 could equally be provided to the central data processing center 1 from a peripheral, like a magnetic tape. This was standard practice in 1987. Providing the programming in the standard way would meet the requirement that the "information transmission" be received at the "receiver station" even under PMC's restricted notion.

B.   Lockwood in view of Bakula discloses "generating a benefit datum in response to a first control signal"

57.   PMC argues that in the combination of Lockwood and Bakula that insurance quotations are not generated in response to the "first control signal" [PMC Resp., p. 42-43; Russ Decl. ¶¶115-116]. In the combination of Lockwood and Bakula that I proposed in Neuhauser 1, the control signals would at least include the programming stored at the kiosk terminal 1 [Neuhauser I, ¶¶153-157].

58.   At ¶140 of his report Dr. Russ states that one of ordinary skill in the art would recognize that the central data processing center 1 does not generate a "benefit datum" (i.e. the personalized insurance quotation) in response to input from the keyboard at the kiosk. Instead, he says that the central data processing center 1 operates only according to programming instructions. This is a very restricted view of what the computer based system of the central data processing center 1 does. Certainly, it operates according to program instructions, but it does much, much, more than that; it also operates in response to signals it receives from its peripherals. Dr. Russ quotes from Lockwood 5:39-43:

> The memory 23 stores program information and information on insurance policies and process for various insurance companies, which are periodically up-dated form the terminals 4 of the various companies, and information on policy quotes and sales, which can be accessed periodically by the respective insurance company terminals. The processing unit 22 operates in response to program instructions to perform insurance quotation calculations in response to customer information received from any of the terminals, to send quotation data to the respective terminal, and to receive credit card information from a terminal and access the credit information terminal for credit approval or disapproval of a particular credit card. (Lockwood 5:39-52)

59. This very passage points out that in addition to responding to programming instructions the processing unit 22 (within the central data processing center 1) also responds to the customer information received from the kiosk. This would be something that one of ordinary skill in the art would understand even without the teachings of Lockwood above. Furthermore, the central data processing center 1 is notified that the customer information is available because the customer has indicated the completion of the data entry. This is what triggers the kiosk terminal 2 to contact the central data processing center 1 over the phone line in the preferred embodiment. This in turn causes the computation (or generation) of the insurance quotation based on the information received. Unless the customer indicates that the input of information is complete and unless the kiosk terminal 2 contacts the central data processing center 1 there can be no calculation of an insurance quotation. This is clear because there would be no customer information on which to base an insurance quotation. Thus, it would be clear to one of ordinary skill in the art that the insurance quotation is generated in response to the keyboard input that indicates that the gathering of personal information is complete.

60. With respect to the second element of claim 1, PMC argues that the "benefit datum" (i.e., the insurance quote of Lockwood) is not generated in

response to a "first control signal"[3] [PMC Resp. p. 42-43]. In my initial declaration I stated that in the combination of Lockwood and Bakula the control programs loaded into kiosk terminal 1 represent the "first control signal" [Neuhauser 1, ¶157]. PMC points out that the control programs only execute at terminal 1 and that the insurance quotation is calculated by the program that resides on the central processor (22) [PMC Resp. p. 42-43; Russ Decl. ¶¶116-117]. However, the claim only requires that the benefit datum be generated "in response to" the "first control signal" and not by such signal. The section of Lockwood quoted by Dr. Russ [Lockwood 7:56-8:2] and the referenced Fig. 6 demonstrate that the insurance quotation is generated only when the central processor receives a quotation request [Fig. 6, item 64]. This quotation request originates directly from the control program of the terminal 1 as stated in the citation. One of ordinary skill in the art would understand this because this is basic computer operation.

61.   The "information content" and the "first control signal" can be in two separate transmissions. Furthermore, the understanding of one of ordinary skill in the art under a broad and reasonable interpretation would be that claim 1 does not

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[3] PMC uses the terminology "instruct signal" in this section of their response. I assume PMC is referring to the "first control signal" as there is not "instruct signal" in claim 1 of the '717.

42

place any restriction on the amount of time that may separate the two transmissions. As I stated above the only requirement is that the generation of the benefit datum occur "in response to" the "first control signal". This certainly occurs in the combination of Lockwood and Bakula.

C. Lockwood in view of Bakula discloses "delivering said information content and said benefit datum at an output device"

62.   The third element of claim one requires "delivering said information content and said benefit datum at an output device at said receiver station". PMC contents that the combination of Lockwood and Bakula does not deliver the "information content" and the "benefit datum" to an output device [PMC Resp. , p.43-44; Russ Decl. ¶118]. Previously, I described the "benefit datum" as an insurance quotation, which would certainly include the price of the policy. However, as I pointed out in Neuhauser 1 the insurance quotation must include other information received from insurance companies via company computers or terminals (4) [Neuhauser I, ¶71]. As one of ordinary skill in the art would understand an insurance quotation would not simply be a number, but would include details about the extent and limits of policy coverage, which varies from company to company. Lockwood describes that the customer may compare policies insurance quotations between companies, [Lockwood 1:31-36]. Even if this information were not provided in the insurance quotation itself, it is at least

available to the customer prior to the purchase. Otherwise there would be no way to make a comparison between policies, which Lockwood explicitly describes as one option:

> It is also an object of this invention to provide the general public information about comparable insurance coverages from several sources for comparison purposes and to automatically generate and issue insurance binder agreements according to customer's choice and specifications. (Lockwood 1:31-36)

63.   Similarly, Lockwood describes that customers may determine which products or services a customer is interested in and provide them [Lockwood 2:35-47]:

> The central data processing center stores information on the services and prices offered by each institution, and on customer sales completed by each sales and information terminal. The central data processing center is programmed to transmit periodically to each institution's data processing terminal, either directly or indirectly, for example through an automated telecommunication network service such as TELENET®; up-dated information on sales made by the system for that institution. The center is also programmed to receive information on any changes in price or services offered by each institution in the same way, and up-date the information stored accordingly. (Lockwood 2:35-47)

64. Just based on common sense one of ordinary skill in that art would expect that before making a purchase a customer would be able to obtain detailed information on a policy (i.e. the proverbial "fine print"). Claim 1 of the '717 patent places no restriction on when such information (i.e. the "information content") must be delivered to an output device and whether or not it must be delivered before, after or at the same time as the price quotation (i.e. the "benefit datum").

D. Lockwood in view of Bakula and Lemon discloses delivering "based on a schedule" (Claim 7)

65. With respect to the combination of Lockwood and Lemon or the combination of Lockwood, Bakula and Lemon, Dr. Russ says that the sequential display of coupons is not a "schedule" as required by claim 7 [Russ Decl. ¶165]. I have addressed this opinion above with respect to the combination of Humble and Lemon. One of ordinary skill in the art would see this as a presentation according to a schedule because each page is displayed after a "prescribed period of time" [Lemon 5:35-38]. Just because the coupons are not displayed at a specific time (i.e. 5:07 PM) does not mean that they are not displayed according to a schedule. In this case the schedule is to display each page after a prescribed period of time. If a sign says that airport shuttles will arrive every five minutes, even those

45

unskilled in the art recognize that the busses are arriving on a schedule. Lemon has the same notion of a schedule, namely, regularly at fixed intervals.

66. In proposing the combination of Lockwood, Bakula and Lemon, I assumed that the "information content" corresponded to details of the insurance policy, such as coverage and limits [Neuhauser ¶71]. This would be the sort of information provided by the insurance company terminals 4 and does not correspond to the information in the video presentations. The addition of Lemon to the combination of Lockwood and Bakula is for the purpose of allowing insurance policy information and quotations to be scrolled, thus providing a way for information that might exceed the size of Lockwood monitor 8. With this enhancement the insurance products offered and their price could be presented successively to the customer for selection, in exactly the same way that a number of coupons are presented for selection to the customer in Lemon. Because this is text or graphic information about policies it would not interfere with the video as PMC suggests [PMC Resp., p. 49] because it is unrelated to the video.

67. With respect to the combination of Lockwood, Bakula and Lemon, Dr. Russ argues that Lemon does not explain how information from an outside source could be delivered through a central data processor to an output device based on a schedule [Russ Decl. ¶ 171]. This is not a correct interpretation of Lemon or of claim 7. Claim 7 only requires that the "information content" and the

"benefit datum" be delivered to an output device on a schedule. The "schedule" aspect of claim 7 only relates to the step of delivering, not to the other steps of the claim, such as the "receiving step" as Dr. Russ seems to imply.

68.   Certainly one of ordinary skill in the art would understand that manufactures must provide coupon descriptive information and, particularly, the number of coupons to be issued to the host computer of Lemon. For example, Lemon describes that the number of coupons to be dispensed at a particular terminal would be controlled from the host computer [Lemon 27:59-61]. One of ordinary skill in the art would expect that the manufacturer controls the type and value of a coupon through the host central processing unit H, as this is the only way Lemon describes updating of the coupon dispensing terminals T. Once coupons, their value and number are programmed into a terminal the coupons are delivered according to a schedule as described at Lockwood 10:41-11:5 and even claimed at 32:28-34. One of ordinary skill in the art would not need instruction from Lemon to understand that in the Lockwood/Bakula combination that "information content" in the form of policy descriptive information is received from the insurance company terminals 4. The only teaching they would need from Lemon is how policy information would be displayed as scrolling pages according to a schedule.

Declaration

I declare that all statements made herein on my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

By: *Charles J Neuhauser*

Charles J. Neuhauser, Ph.D.

15 JAN 2014