IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

TV GUIDE ONLINE, INC. AND TV GUIDE ONLINE, LLC, Plaintiffs, v. TRIBUNE MEDIA SERVICES, INC. Defendant.	Civil Action No. 05-725 (KAJ) **REDACTED - PUBLIC VERSION**

REBUTTAL EXPERT REPORT OF J. TIPTON COLE
CONCERNING VALIDITY

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I, J. Tipton Cole, have been retained to testify as an expert on behalf of TV Guide Online, Inc. and TV Guide Online, LLC (collectively "TV Guide") in this action. In addition to the matters set forth in my December 15, 2006 Expert Report, I expect to testify at trial regarding the matters stated in this report, if asked by the Court or by the parties' attorneys.

I understand that discovery in this action is ongoing. Accordingly, I expressly reserve the right to amend or supplement this report after receiving and reviewing any additional discovery.

Moreover, if TMS's experts are permitted to supplement their expert reports and/or to express additional opinions concerning validity, I expressly reserve the right to amend or supplement this report as appropriate.

I. QUALIFICATIONS

1. I hereby incorporate by reference the statement of my qualifications, as set forth in my December 15, 2006 Expert Report.

2. A copy of my curriculum vitae was attached as Exhibit A to my December 15, 2006 report. It includes a list of industry associations in which I am, or have been active; and a list of companies to whom I have provided consulting services (on a non-confidential basis).

3. The CV sets forth details of my engagements as a designated expert, listing the style of the cases and the dates on which I testified by deposition or at trial.

II. MATERIALS CONSIDERED

4. I base the opinions that I express in this Report on my education and nearly 30 years of experience in the field of software development and commercial database application design. I also base my opinions on a review of the materials provided by the parties during discovery in this case, including a review of United States Patent Number 5,988,078 ("the

patent-in-suit" or "the '078 patent"), the prosecution histories of the applications that led to the '078 patent, and the prior art.

5. The list of materials I reviewed in formulating my opinions, in addition to the materials I identified in Exhibit E to my December 15, 2006 Expert Report, is set forth in Exhibit A to this Report.

III. SUMMARY OF OPINIONS TO BE EXPRESSED

6. In addition to those opinions expressed in my December 15, 2006 Expert Report, if called as an expert witness in this action on issues related to the validity of the '078 patent, I expect to testify about the scope and content of the prior art, and to offer my opinion that the systems and references[1] identified in the Expert Report of Dr. Gary S. Tjaden Regarding Invalidity, dated December 15, 2006 ("Tjaden Report"), do not teach or include all of the elements or steps of any of the asserted claims of the '078 patent,[2] either expressly or inherently. Moreover, I expect to respond to Dr. Tjaden's assertion that the asserted claims of the '078 patent are invalid for obviousness. And, I expect to testify that the asserted claims of the '078 patent are fully enabled and are not indefinite.

7. In considering these topics, I am interpreting the asserted claims of the '078 patent in the same manner as I articulated in my December 15, 2006, Expert Report. I note that, even under the interpretation of the asserted claims of the '078 patent adopted by Dr. Tjaden, my opinions expressed here would remain unchanged. In that regard, I have reviewed TMS' Revised Proposed Constructions, dated January 18, 2007. I expressly reserve the right to supplement this Report and/or my December 15, 2006 Expert Report as necessary to respond to issues that may arise as a result of TMS' revised constructions.

[1] Although I address these systems and references as if they are in the prior art, I understand that it is TMS's burden to prove that these references are, in fact, prior art to the '078 patent

[2] I understand that TV Guide is currently asserting that TMS infringes claims 1-8 and 10 of the '078 patent

IV. OPINIONS TO BE EXPRESSED AND BASES FOR THOSE OPINIONS

8. I have been advised that the claims of an issued patent are presumed to be valid.

A. The Asserted Claims of the Patent-In-Suit Are Not Anticipated by the Systems and References Identified by Dr. Tjaden

9 I understand that a patent claim is anticipated if each and every limitation of the claim is disclosed either expressly or inherently in a single prior art reference. I understand that a claim limitation is inherently disclosed in a prior art reference if a person of ordinary skill in the art would understand that the limitation must necessarily be present in the reference

10. In his Report, Dr. Tjaden asserts that "each of CompuServe, Tydeman and Young anticipate all asserted claims of the '078 Patent," "Muguet anticipates claims 1, 3, 4, 5, 6, 8 and 10," "[Personal Entertainment Guide] anticipates claims 1, 3, 4, 5 and 6," and "Prodigy anticipates claims 1, 3, 4, 5, 6, 8 and 10, rendering them invalid." Tjaden Report at 22-23 ¶ 53.

11. I disagree with Dr. Tjaden's opinions on the issue of anticipation. Claim 1 has a limitation calling for "transmitting information to a service provider regarding the geographical area of the viewing location." Claims 6 and 8 have similar limitations, with minor variations in claim language. Each of those claims then includes an additional limitation that the user receives television programming information specific to the viewing location, again with minor variations in claim language.[3] As I will explain in more detail below, however, none of the systems or references asserted by Dr. Tjaden discloses the idea of receiving television program information in response to the transmission of geographic information.

12. Indeed, Dr. Tjaden acknowledges that the references and systems on which he relies do not explicitly disclose these limitations. Instead, Dr. Tjaden offers only a speculative assumption that a person of ordinary skill in the art **would have known** to receive

[3] I understand that the parties have proposed different constructions for the term "receive/receiving." *See* my December 15, 2006 Expert Report at 25-28. For purposes of the opinions I express here, both constructions yield the same conclusion

television programming information in response to transmission of geographical information.

For example, Dr. Tjaden argues:

(a) CompuServe: "A skilled artisan **would have known** that, since information transmitted to a service provider **can include** geographical information, then necessarily this information **can be used** as criteria to select specific portions of the database for downloading that match that criteria."

(b) Tydeman: "A skilled artisan **would have known** that, in light of the above two citations it **can be inferred** from Tydeman that the relational data fields of 'Address,' 'City,' and 'Zip' **may be part** of a database used to provide **many types** of information, and thus transmitted by the 'computerized unit' to an information service provider."

(c) Tydeman: "I note that one skilled in the art **would have known** that 'What's On' **implicitly** refers to entertainment programming information, including television programming."[4]

(d) Tydeman: "A skilled artisan **would have known** that, since information transmitted to a service provider **can include** geographical information, then necessarily this information **can be used** as criteria to select specific portions of the database for downloading that match that criteria."

(e) Young: "A skilled artisan **would have known** that, since information transmitted to a service provider **can include** geographical information, then necessarily this information **can be used** as criteria to select specific portions of the database for downloading that match that criteria."

(f) Muguet: "A skilled artisan **would have known** that for viewing locations served by multiple programming sources (e.g., 'air, cable, satellite') the identification of specific programming available to the viewing location necessarily would require a specification of both geographical location and programming source. Therefore Muguet **inherently** includes the requirement of this claim element to specify geographical location."

(g) Muguet: "A skilled artisan **would have known** that, since information transmitted to a service provider **can include** geographical information, then necessarily this information **can be used** as criteria to select specific portions of the database for downloading that match that criteria."

(h) PEG: "PEG teaches that the files downloaded to the user's personal computer on which PEG resides and is run contain information specific to the geographic area and serving Cable Company at the viewing location. **Necessarily** information 'regarding the geographical location of the particular viewing location' must be sent to the PEG main computer in order for it to determine the specific files, identified by the area code, Cable Company id and Cable Company Zone number, to send to the requesting personal computer.

[4] See below for explanation that "What's On" did not, in fact, include television programming information.

(i) PRODIGY: "A skilled artisan **would have known** that, since information transmitted to a service provider **can include** geographical information, then necessarily this information **can be used** as criteria to select specific portions of the database for downloading that match that criteria."

13. Dr. Tjaden does not, however, point to any teachings in the art that support his arguments. To the contrary, Dr. Tjaden merely uses language such as "can include," "may be part," and "can be used" to support his assertions. Simply put, there was no reason for a person of ordinary skill in the art to believe that these limitations were necessarily present in the references and systems relied upon by Dr. Tjaden.

14. The U.S. Patent Office record of the prosecution of the applications that led to the '078 patent confirms that the applicant identified these "transmitting" and "receiving" features as one way to distinguish his invention from the prior art. See, e.g., '078 patent prosecution history at TG002283.

15. Not a single one of the references and/or systems relied upon by Dr. Tjaden discloses a tie between transmission of geographical information from a user's computer and receipt of television programming information from the information service provider.

16. To the extent the prior art discloses the transmission of geographic information, that information is used to request, for example, weather information (not television programming listings).

17. To the extent the prior art discloses the receipt of television programming listings, that information is obtained without any disclosed use of transmitted geographic information.

18. In the end, the asserted prior art references and systems on which Dr Tjaden relies comprise the work of dozens of skilled artisans, including the computer programmers and managers at CompuServe. Even so, none of the references or systems anticipates the asserted claims of the '078 patent.

1. **The CompuServe system**

19. Dr. Tjaden asserts that claims 1-8 and 10 of the '078 patent are anticipated by the CompuServe system.

20. Dr. Tjaden relies on four documents, each of which purports to describe some version of the CompuServe system:

- B. Schepp and D. Schepp, *The Complete Guide to CompuServe*, Osborne McGraw-Hill, 1990 (TMS 0058354);
- *CompuServe Information Service Today*, Jan 1982 (TMS 0001076-83);
- *Alfred Glossbrenner's Master Guide to CompuServe*, 1987 (TMS 0054630-45); and
- *Online Today*, Jan 1985 (TMS 0054628-29).

21. Without further information, I cannot verify that these four documents do, in fact, describe the same system. I would be surprised, however, if the CompuServe system did not change over the nine year period encompassed by these documents. For example, the newspaper options to which Dr. Tjaden refers in connection with the TODAY 1982 reference (e.g., "GO SFC-7") were an experiment that was terminated by the fall of 1982.[5] The Schepp reference, on the other hand, apparently discusses a later version of CompuServe. For example, the figures showing navigation in the Schepp reference consistently depict the CompuServe Information Manager (CIM), a menu interface to CompuServe that was "released only at the end of 1989." *Id.* Indeed, the minimal computer operating system necessary for using the CIM menu interface was MS-DOS 2.0, Schepp at 38-39, which was not even available until early 1983. It appears, therefore, that the CompuServe system described by the TODAY 1982 reference differs in significant ways from the system described by Schepp. Dr. Tjaden then combines these disparate materials. Accordingly, they cannot be anticipating.

[5] The CompuServe newspaper options disclosed in the TODAY 1982 reference are discussed in a 1983 book by Efrem Sigel, entitled "The Future of VideoText." As Sigel explains: "A two-year experiment in videotext journalism involving the Associated Press (AP), 10 newspapers and CompuServe ended June 30, 1982. With the experiment's conclusion, only three newspapers are continuing to provide CompuServe with electronic information." *Id.* at 61.

22. In my opinion, even if the four references relied upon by Dr. Tjaden do describe the same CompuServe system, the CompuServe system does not anticipate the asserted claims of the '078 patent.

23. As described in the four documents upon which Dr. Tjaden relies, CompuServe was a personal information service for computer users that, as of 1990, offered more than 1400 databases and services to the average computer user. Schepp, at xxvii. For example, the CompuServe system provided access to news, sports, and weather along with travel, health, finance and games. CompuServe also provided "forums" in which users could post comments for debate or support on a variety of personal, professional or technical topics.

24. The CompuServe system does not, however, disclose at least the "transmitting" step of claim 1 (1.3), the "receiving" step of claim 1 (1.4), the "zip code" limitation of claim 2, the "schedule" limitation of claim 3, the "displaying" step of claim 4, the "memory" limitation of claim 5, the "transmitting" step of claim 6 (6.3), the "receiving" step of claim 6 (6.4), the "viewing" step of claim 6 (6.5), the "zip code" limitation of claim 7, the "receive" element of claim 8 (8.1b), the "transmit" element of claim 8 (8.1c), the second "receive" element of claim 8 (8.1d), or the "memory" element of claim 10.

25. No CompuServe database or service delivered television programming information or a television schedule to the user based on the transmission of geographical information, as claimed by the '078 patent.

26. The references on which Dr. Tjaden relies in describing the CompuServe system do not disclose the transmission of any geographical information – much less a ZIP code – by a user as part of a system or method for receiving television programming information. In connection with the retrieval of information not related to television programming (such as weather reports), the references on which Dr. Tjaden relies specifically teach the use of geographical information. There is, however, absolutely no suggestion in those references that geographic information is used in connection with television programming information –

much less schedules of available programming. As such, it is not reasonable for Dr. Tjaden to conclude – based on these references – that the CompuServe system was capable of using transmitted geographic information to obtain television programming information.

27. Dr. Tjaden argues that user entry and transmission of, for example, "SFC-7" – a "GO" term that presumably enabled a user to view television information printed in the San Francisco Chronicle (although I note that there is no disclosure of what was actually transmitted to the user) – constitutes the transmission of geographic information. Tjaden Report, Exh 3 at 3.

28. I disagree with this assertion. "GO" terms, such as "SFC-7," were simply shortcuts for selecting items from menus or lists of CompuServe databases (e.g., a particular section of the San Francisco Chronicle online edition). The concept of using menus or lists to select information was one aspect of the prior art that was distinguished from the '078 patent's claimed inventions during the prosecution of the '078 patent. See '078 patent prosecution history at TG002283. Moreover, user entry of such a shortcut term or keyword is not the same as transmission of geographic information from the user to the service provider. The user is not entering geographic information (e.g., San Francisco), but instead the shortcut term for what the user wants (i.e., the page[6] named "SFC-7"). Dr. Tjaden's assertion that "The number '7' is the number of the CompuServe page within the San Francisco area database" is purely supposition. None of the references on which he relies teaches the deconstruction of what Schepp describes as a (single, unified, coherent, undifferentiated) "page number."

29. Dr. Tjaden asserts that the "SF" portion of the entry "SFC-7" acts as encoded geographic information. Again, I disagree with this assertion. The CompuServe system does not "decode" the "SFC" part of the page name or in any way map "SF" or "SFC" to

[6] Schepp at 26, "If you select the option Today's News from the Monitor menu you will see the page number OLT-90, shown in Figure 2-3." The CompuServe screen display in Figure 2-3 bears the legend "CIS:OLT-90" at the bottom. *See also* Schepp at 321-323. The "GO" word is a command that the user employs to "move directly to the page or menu" of his choice. *Id.* at 50

a geographic location. Instead, based on the references on which Dr. Tjaden relies, a person of ordinary skill in the art would understand that the CompuServe system treated the entry "SFC-7" as a pointer to a page, NOT as geographic information.

2. The Tydeman reference

30. Dr. Tjaden asserts that claims 1-8 and 10 of the '078 patent are anticipated by J. Tydeman, et al., *Teletext and Videotex in the United States: Market Potential, Technology, Public Policy Issues*, McGraw-Hill Publications Co., 1982 (the "Tydeman reference").

31. The Tydeman reference discloses teletext and videotext technologies circa 1982. While aimed at the then-current use, prospective uses and public policy issues of those technologies in the United States, Tydeman also describes much of the technology in terms of existing products, services and experiments outside the U. S.

32. The Tydeman reference does not, however, disclose at least the "transmitting" step of claim 1 (1.3), the "receiving" step of claim 1 (1.4), the "zip code" limitation of claim 2, the "schedule" limitation of claim 3, the "displaying" step of claim 4, the "memory" limitation of claim 5, the "transmitting" step of claim 6 (6.3), the "receiving" step of claim 6 (6.4), the "viewing" step of claim 6 (6.5), the "zip code" limitation of claim 7, the "receive" element of claim 8 (8.1b), the "transmit" element of claim 8 (8.1c), the second "receive" element of claim 8 (8.1d), or the "memory" element of claim 10.

33. The Tydeman reference presents an exhaustive list of "Future Teletext / Videotex Applications," Tydeman reference at 65-69, including multiple entries for electronic publishing, community services, and entertainment, as well as mentions of electronic newspapers, airline schedules, subtitling of TV programs, Sesame Street, supplements to TV advertising and on-demand TV. The Tydeman reference, however, never once mentions access to television programming schedule information, nor accessing such information based on a ZIP code or other geographical information.

34. Dr. Tjaden refers to the option 'What's On" in a table entitled MOST POPULAR TOPICS ON PRESTEL, 1978-1979. Tjaden Report, Exh. 4 at 4 (citing Tydeman reference at 61 tbl.5.2). Dr. Tjaden then writes, "I note that one skilled in the art would have known that 'What's On' **implicitly** refers to entertainment programming information, **including television programming**" (emphasis added).

35. I disagree with this assumption. First, there is no reason why "What's On" would necessarily refer to television programming. Second, Dr. Tjaden's assumption is simply incorrect. The Prestel "What's On" option is addressed in "The Future of VideoText" by Efrem Sigel. Figure 5.1 on page 87 of Sigel explains: "If you want to find out ***what's on at the cinema*** you could take either of the routes outlined below" (emphasis added). Figure 5.1 then depicts a flow-chart showing how a Prestel user can successively select the menu options "GENERAL INTEREST INFORMATION" (Key 1), "ENTERTAINMENT" (Key 3), and "WHAT'S ON" (Key 2). The set of options then presented to the user are:

1. CINEMAS
2. THEATRES
3. NIGHT LIFE
4. CONCERTS
5. OTHER EVENTS

None of the options presented refers in any way to television. Accordingly, Dr. Tjaden's assertion as to what "one skilled in the art would have known ... implicitly" is simply incorrect.

36. Dr. Tjaden also asserts that "A skilled artisan **would have known** that . . . it **can be inferred** from Tydeman that the relational data fields of 'Address,' 'City,' and 'Zip' **may be part of** a database used to provide many types of information, *and thus transmitted by the 'computerized unit' to an information service provider*." Tjaden Report, Exh. 4 at 3 (bold emphasis added). This assertion, however, confirms that the Tydeman reference does not anticipate the asserted claims of the '078 patent. Tydeman simply does not address either

transmitting geographical information or receiving television programming information in response to transmitted geographical information.

3. The Young patent

37. Dr. Tjaden asserts that claims 1-8 and 10 of the '078 patent are anticipated by U.S. Patent No. 4,706,121 to Patrick Young (the "Young patent").

38. The Young patent discloses multiple related systems "for controlling a television receiver to allow user selection of broadcast programs from schedule information" and multiple related processes "for controlling the presentation of broadcast programs to a television receiver, which [comprise] supplying program schedule information to storage means in a data processor, supplying user program selection criteria to the data processor," and combining the schedule information with the program selection criteria to "tune the television receiver to the selected programs."

39. The Young patent does not, however, disclose at least the "transmitting" step of claim 1 (1.3), the "zip code" limitation of claim 2, the "transmitting" step of claim 6 (6.3), the "zip code" limitation of claim 7, the first "receive" element of claim 8 (8.1b), or the "transmit" element of claim 8 (8.1c).

40. Specifically, as explained by the applicant during the prosecution of the '078 patent, the Young patent does not disclose how a user accesses a television programming schedule (see '078 patent prosecution history at TG002283).

41. Indeed, the disclosure of the Young patent concerning the access of and downloading of television programming schedules to a computer is limited to the few brief sentences Dr. Tjaden repeatedly quotes: "the schedule information could be accessible with a personal computer through an information utility, such as CompuServe or The Source, and the user could either make the selection inputs to the utility's mainframe for running a selection program on the mainframe and then download the selected program information, or download

the program schedule information for his or her locality, ..." Young patent at 21:67-22:7. This brief passage does not itself disclose the transmission of geographic information, and, as I discussed above, the CompuServe system references relied upon by Dr. Tjaden do not disclose the transmission of geographic information. Therefore, the reference to the CompuServe system in the Young patent simply does not serve as disclosure of using transmitted geographic information to access television programming information.

42. As Dr. Tjaden notes, Tjaden Report at 19 ¶ 48, the Young patent was considered by the Examiner during prosecution of the application that led to the '078 patent.

43. Dr. Tjaden, however, asserts that the applicant mischaracterized the Young patent in its response to the Examiner's rejection. Tjaden Report at 20-21, ¶¶ 48-49.

44. I disagree. Based on my review of the Young patent, I believe the applicant accurately stated that the Young patent "does not imply transmitting particular geographical location information." '078 patent prosecution history at TG002283. And, as I have explained, I agree with the applicant's statement that "retrieval of information from a database does not, by definition, include or even suggest transmittal of a viewer's geographic location." *Id.*

45. In connection with his anticipation analysis, Dr. Tjaden relies on the CompuServe system to argue that the applicant was mistaken. Tjaden Report at 20. I note, however, that two of the CompuServe references on which Dr. Tjaden relies were published ***after*** the application for the Young patent was filed. Moreover, as I explained above, the CompuServe system does not disclose the transmission of geographic information as part of a system or method for receiving television programming information.

4. The Muguet patent

46. Dr. Tjaden asserts that claims 1, 3, 4, 5, 6, 8, and 10 of the '078 patent are anticipated by U.S. Patent No. 4,787,063 to Francis Muguet (the "Muguet patent").

47. The Muguet patent discloses a system for controlling the use of a VCR-like device. Muguet's system consists of a remote user terminal connected through a network to a "computer server center," with specialty electronic devices and software to: (1) allow the user to select television programs to be recorded; and (2a) program the VCR-like device to record the selected programs or (2b) activate the VCR-like recording device using signals from the central computing service in real time.

48. The Muguet patent does not, however, disclose at least the "transmitting" step of claim 1 (1.3), the "zip code" limitation of claim 2, the "transmitting" step of claim 6 (6.3), the "zip code" limitation of claim 7, the first "receive" element of claim 8 (8.1b), or the "transmit" element of claim 8 (8.1c).

49. Specifically, the Muguet patent includes no disclosure concerning transmission of any information from the user to the information service provider (the so-called computer server center). Instead, the Muguet patent merely describes the selection of programs for recording. The Muguet patent does **not**, however, disclose how this is done, except to say that this functionality is accomplished "with the help of whatever good interrogation software." Muguet patent at 4:45-46.

50. Acknowledging the absence of any actual disclosure, Dr. Tjaden asserts that "Muguet inherently includes the requirement of this claim element to specify geographical location." Tjaden Report, Muguet Claim Chart at 2-3.

51. I disagree. There is no reason that a user of the system disclosed in the Muguet patent would necessarily transmit "geographical location and programming source" to effect the desired television program selection. Given that the user indicates his requirements by **selection**, there would be no need for the user to identify the geographical location of his viewing location. Instead, by selecting a network or channel, time of day, program name, genre, or other criteria in any order, from sets of lists and/or menus, the Muguet system's user could **select** a program to record.

52. Finally, Dr. Tjaden argues that "[a] skilled artisan would have known that for viewing locations served by multiple programming sources (e.g., 'air, cable, satellite') the identification of specific programming available to the viewing location necessarily would require a specification of both geographical location and programming source." Tjaden Report, Muguet Claim Chart at 2-3.

53. I disagree. A person of ordinary skill in the art would understand that it is **not** necessary to identify both geographical location and programming source. The identification of programming source (the "headend" or "provider") alone would be sufficient to identify information specific to the television programming available to a particular viewing location.

5. The Personal Entertainment Guide system

54 Dr. Tjaden asserts that claims 1, 3, 4, 5, and 6 of the '078 patent are anticipated by the Personal Entertainment Guide (PEG) system.

55. To support his view, Dr. Tjaden relies on one document. *The Personal Entertainment Guide User's Guide Version 1.0*, Lookahead Communications Inc., 1991 (the "PEG User's Guide"), which purports to describe one version of the Personal Entertainment Guide system.

56. As described in the PEG User's Guide, the PEG system is a "television listing magazine implemented on a personal computer." PEG User's Guide at I-1 (TMS 0001111). The PEG system was a subscription service. Users of the PEG system used a computer program at "a convenient time and day" each week to "download the next issue of the magazine."

57 The PEG system, as described in the PEG User's Guide, does not, however, disclose at least the "transmitting" step of claim 1 (1.3), the "zip code" limitation of

claim 2, the "transmitting" step of claim 6 (6.3), the "zip code" limitation of claim 7, the first "receive" element of claim 8 (8.1b), or the "transmit" element of claim 8 (8.1c).

58. As described in the PEG User's Guide, the PEG system did not provide for the user input or transmission of any geographical information – much less a ZIP code. Specifically, the PEG User's Guide provides a single page explanation of the "Download Protocol" (the method by which a user could download updated television listings) PEG User's Guide, App. C (TMS0001173). This page describes seven types of acceptable transmissions from the user's personal computer to the PEG central computer (called the "LCI computer"). They are:

> (CR) – indicates to the LCI computer that your computer is active
>
> "L" (your 22 byte account number) (CR) – logs onto the LCI computer
>
> "C" (CR) – requests a list of available files for your account
>
> "F" (the name of the file to be downloaded) (CR) – request a specific file to be downloaded
>
> "U*" (CR) – indicates a successfully downloaded block
>
> (CR) – indicates an unsuccessfully downloaded block
>
> "X*" (CR) – orders the main computer to hang-up

Id. None of these transmissions is geographical information.

59. Acknowledging that there is no actual disclosure of transmission of geographic information, Dr. Tjaden asserts: "Necessarily information 'regarding the geographical location of the particular viewing location' must be sent to the PEG main computer in order for it to determine the specific files, identified by the area code, Cable Company id and Cable Company Zone number, to send to the requesting personal computer." Tjaden Report, Exh. 7 at 4.

60. I disagree with this assertion. Dr. Tjaden asserts that, because both user account numbers and update file names contained area codes, transmission of that data

involves transmission of geographic information – the user's area code. Dr. Tjaden's assertion is incorrect.

61. First, during his deposition, Mark Kaplinsky stated that neither the user's phone number nor the user's address was needed to create the user's key file. Kaplinsky Tr. at 94-95 ("Q: Did you need the user's address in order to designate the proper key file for the users? A: No. That was completely described by the cable system"). This supports my opinion that the transmission of geographic information, such as the user's area code and/or address certainly was not necessary in the PEG system.

62 Second, Mr. Kaplinsky explained that the "Cable System" field on the user signup flier: "was the field that told us whether to put in 718QO or 212MO or 213PO or whatever other code that was necessary at that point. They would say, for example, Manhattan Cable TV rebuilt, and we would know to put in 212MO..." Kaplinsky Tr. at 93. In other words, the identifier "212MO" meant "Manhattan Cable TV rebuilt," not "I live in the geographic area covered by area code 212." Dr. Tjaden acknowledges that the '078 patent at 3:50-54 distinguishes between geographic information and programming source. Tjaden Report, Exh. 4 at 2. Similarly, there is no reason to believe that the area code portion of a file name was in any way treated as anything other than part of a file name – it carried no additional significance.

63. Finally, Dr. Tjaden refers to the Kaplinsky deposition at pages 52-55 and pages 105-108 as "showing the transmission of encoded geographical information." *See, e.g.*, Tjaden Report, Exh. 4 at 4. I disagree with Dr. Tjaden's interpretation of Mr. Kaplinsky's testimony. On pages 52-55, Mr. Kaplinsky says that the operators (at LCI) of the PEG system (***not*** the users of the system) "inputted a code for the particular cable system and zone" and then "encode[d] that into the disks that we sent to the user." Mr. Kaplinsky characterized the disks as having "the information that specified the right cable system" (emphasis added). That is, the information on the disk actually identified the programming source, not the viewing location.

64 On pages 105-108 of his deposition transcript, Mr. Kaplinsky explains the user download process: "You pressed one key which was essentially transmit, and essentially this code here as we see, 718 GQ, da-da-da, was essentially the cable system. That's the key information that was sent to the bulletin board." Kaplinsky Tr. at 105; *see also* the PEG User's Guide, App. E (Sample PEG.LOG). Mr. Kaplinsky's testimony is consistent with the first two steps in the list of acceptable transmissions above, in which the user's computer establishes contact and transmits what is identified as the 22-byte account number. As I have explained, however, the code Mr. Kaplinsky is describing – beginning "718 GQ" – is an identification of the programming source, not an identification of geographic location. There is no indication in either Mr. Kaplinsky's testimony or the remainder of the PEG User's Guide that any part of that 22-byte account number is segregated and used as any type of "information regarding the geographical location of the particular viewing location."

6. The PRODIGY system

65. Dr. Tjaden asserts that claims 1, 3, 4, 5, 6, and 10 of the '078 patent are anticipated by the PRODIGY system.

66. Dr. Tjaden relies on a single document: J.L. Viescas, *The Official Guide to the Prodigy Service*, Microsoft Press, 1991, which purports to describe one version of the PRODIGY system.

67. Without further information, I cannot verify that this document does, in fact, describe the PRODIGY system. Even if this document does describe the PRODIGY system, in my opinion, that system, as described, does not anticipate any of the asserted claims of the '078 patent.

68 As described by the Viescas reference, the PRODIGY system is as an "Interactive Personal Service" that can "take advantage of the power of today's [1991] personal computers." Viescas at ix.

69. The PRODIGY system does not, however, disclose at least the "transmitting" step of claim 1 (1.3), the "receiving" step of claim 1 (1.4), the "zip code" limitation of claim 2, the "schedule" limitation of claim 3, the "displaying" step of claim 4, the "memory" limitation of claim 5, the "transmitting" step of claim 6 (6.3), the "receiving" step of claim 6 (6.4), the "viewing" step of claim 6 (6.5), the "zip code" limitation of claim 7, the "receive" element of claim 8 (8.1b), the "transmit" element of claim 8 (8.1c), the second "receive" element of claim 8 (8.1d), or the "memory" element of claim 10.

70 As described in the Viescas reference, the PRODIGY system did not disclose the transmission of any geographical information – much less a ZIP code – by a user as part of a system or method for receiving television programming information. Geographic information could be transmitted as part of a request for weather information (e.g., "[JUMP]: *w dallas*"), Viescas at 127, or as part of a request for airline flight availability using the EAASY SABRE system. Viescas at 266. There is absolutely no suggestion, however, that geographic information was used in connection with television programming information – much less schedules of available programming. Moreover, neither of these capabilities involved the transmission of ZIP codes.

71 Dr. Tjaden also asserts that geographic information is transmitted when news or weather information is selected from pop-up menus and/or lists by a user. Tjaden Report, Exh. 8 at 2. As I have explained, however, prior art teachings directed to the selection of information by the user from menus and/or lists was distinguished by the applicant during prosecution of the '078 patent. As such, I do not agree with Dr. Tjaden's conclusion – based on these references – that the PRODIGY system was necessarily capable of using transmitted geographic information to obtain television programming information.

72. As described in the Viescas reference, the PRODIGY system also did not disclose receiving information specific to a viewing location. The Viescas reference explains that "TV News gives you the latest information on new shows, cancellations, time slot changes,

and stars." Viescas at 94. There is no disclosure, however, of the receipt of anything other than generic information related to television programming (i.e., the information was not "specific" to a "viewing location").

73. Dr Tjaden asserts that "necessarily [geographical] information can be used as criteria to select specific portions of the database for downloading that match that criteria." Tjaden Report, Exh. 8 at 3. I disagree with this assertion. There is no disclosure of how television programming information was stored in the PRODIGY system. It is, therefore, not necessarily the case that geographic information could be used to access that information.

B. The Asserted Claims of the Patent-In-Suit Are Not Rendered Obvious by the Systems and References Identified by Dr. Tjaden

74. I understand that a patent claim is invalid for obviousness if the differences between the subject matter of the claim and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. I understand that an obviousness analysis may also take into account certain objective indicia of non-obviousness, such as copying, commercial success, and long-felt need.

75. Dr. Tjaden asserts that "claims 2 and 7 are obvious in view of Muguet because what is claimed is only a specific limitation or instance of a broader teaching in Muguet." Tjaden Report at 23 ¶ 54.[7]

76. I disagree. As discussed above, Muguet does not disclose the transmission of any identifying information, let alone geographic information, from the user's computer to the information service provider. Absent such a disclosure, it would certainly not have been obvious to transmit geographic information, much less a specific type of information, such as ZIP code.

[7] I do not understand Dr. Tjaden to assert that any other claims are rendered obvious by Muguet. In any event, it is my opinion that none of the asserted claims are rendered obvious by any of the references relied upon by Dr. Tjaden, as discussed further below.

77 Dr. Tjaden further asserts that "Claims 2 and 7 are rendered obvious by each of PEG and PRODIGY in combination with at least each of CompuServe, Tydeman or Young," and that "claims 8 and 10 are rendered obvious by PEG in combination with at least each of CompuServe, Tydeman, Muguet, Young or PRODIGY." Tjaden Report at 23 ¶ 54.[8]

78 I disagree. As discussed above, none of these references or systems discloses the receipt of television program information in response to the transmission of geographic information. It is impossible, therefore, for any combination of these references and systems to include these limitations.

79. Finally, Dr. Tjaden makes the broad assertions that "each and every prior art reference listed in EXHIBIT 2 can be combined with one or more other prior art references for purposes of determining obviousness of each of the asserted claims," Tjaden Report at 23 ¶ 54, and "that each of the charted references, in combination with any one or more of the other prior art or charted references listed in EXHIBIT 2, renders all asserted claims invalid due to obviousness." Tjaden Report at 23 ¶ 55.

80. I disagree with both of these assertions. First, Dr. Tjaden does not identify any specific combinations of references or any specific motivation to combine those unspecified references. Second, none of the references or systems relied upon by Dr. Tjaden discloses the receipt of television program information in response to the transmission of geographic information. Because none of the prior art references relied on by Dr. Tjaden addresses these limitations, it is my opinion that no combination of the prior art references renders these two claim elements obvious.

81 In his report, Dr. Tjaden presents three arguments suggesting that a person of ordinary skill in the art would be motivated to combine the prior art references. These are:

[8] I do not understand Dr Tjaden to assert that any other claims are rendered obvious by PEG and PRODIGY in combination with at least each of CompuServe, Tydeman or Young; or by PEG in combination with at least each of CompuServe, Tydeman, Muguet, Young or PRODIGY. In any event, it is my opinion that none of the asserted claims are rendered obvious by any of the references relied upon by Dr Tjaden

(1) "The various references all relate to the display of [computer readable data] to the user and to the use of this data to, for example, select data from an information database for storage or display." Tjaden Report at 17 ¶ 42.

(2) "As another example, persons of ordinary skill in the art would have been motivated to combine the references I discuss because of the rapid pace at which technologies were combined with each other into new types of videotext systems." Tjaden Report at 17 ¶ 43.

(3) "Another motivating factor for combining the various references lies in the economics of providing a saleable customer product." Tjaden Report at 18 ¶ 44.

82. I disagree with these arguments. Dr. Tjaden himself acknowledges that the pace at which computer-related technologies developed during the 1980s and 1990s was "rapid." Not surprisingly, the volume of literature addressing computer-related technologies grew correspondingly. It is unfair, in my opinion, to assume that a person of ordinary skill in the art would select any particular one of billions – or trillions – of available combinations.

83. Indeed, the goals, methods and technologies of the references on which Dr. Tjaden relies are disparate. There is no reason to believe, in my opinion, that a person of ordinary skill in the art would combine references so far afield as, for example, the Muguet patent and the Prodigy system.

84. Moreover, to the extent that persons of ordinary skill in the art, as Dr. Tjaden asserts, were highly motivated to provide saleable customer products by combining the best available features, that motivation tends to prove **non**-obviousness. If the skilled worker was motivated to provide "saleable products" such as those covered by the '078 patent, someone would have done it before Mr. Levine if the invention was indeed obvious. It does not make sense to assume that a person of ordinary skill in the art would select any specific combination, except with the benefit of hindsight, particularly since the references do not disclose any such combination.

85. In the end, aside from one specific suggestion to combine some (non-specific) aspects of the CompuServe system with the system of the Young patent, Dr. Tjaden

has not, in my view, provided any motivation to combine the broader teachings of any of the references on which he relies, and that combination would not produce the claimed invention

86. Not one of the prior art references discussed by Dr. Tjaden describes transmitting geographic information of any sort in order to receive television programming information. The only uses of ZIP code that he cites are to obtain weather or demographic information. Only with the benefit of hindsight could one assume that it would have been obvious to a person of ordinary skill to combine the disparate teachings of these references.

87. Since the '078 patent issued, however, multiple highly-successful systems, such as TMS's Zap2It.com system, which I discussed in my December 15, 2006, Expert Report, have incorporated the claimed features that were missing from the prior art.

88. I expressly reserve the right to supplement my opinions in the event Dr. Tjaden would be permitted by the Court to now identify any specific combination(s) that, in his view, render the asserted claims of the '078 patent obvious.

C. The Asserted Claims of the Patent-In-Suit Are Not Indefinite

89. I have been advised that a patent claim is indefinite if persons of ordinary skill in the art would not understand what is claimed when the claim is read in light of the specification.

90. In his Report, Dr. Tjaden asserted "that Claim 3 is invalid due to indefiniteness" Tjaden Report at 21 ¶ 50. Specifically, Dr Tjaden stated:

> Claim 3 requires: *"wherein the information received from the service provider includes a schedule of the television programming available to the particular viewing location."* The patent description in no way explicitly or implicitly defines the term "schedule." In fact, the term "schedule" is used to mean something at 2.1-6 of the '078 Patent that is different than the meaning given "schedule" at 4:66-5:4 of the '078 Patent. Without any clarification from the specification, I am unable to determine how the "information received" in Claim 3 differs from that required by claim element 1 5. I therefore conclude that Claim 3 is invalid due to indefiniteness.

Id.

91. I disagree with Dr. Tjaden's assertions in that regard.

92. The term "schedule," as it is used, for example, in the context of Claim 3 of the '078 patent (requiring "a schedule of the television programming available to the particular viewing location"), is clear and would be readily understood by a person of ordinary skill in the art. In that context, the term "schedule" means a timetable of television programming. Such a timetable would typically include identification of program names, broadcast times, and channels

93. The term "schedule" is used a total of twenty-three times in the '078 patent – three times in the Claims and twenty times in the specification. In Claim 3, "schedule" is part of the phrase "schedule of the television programming . . ." Similarly, in Claim 6, the phrase "television programming schedule information" appears twice. In my opinion, as used in the '078 patent Claims, the term "schedule" is used consistently and conveys the specific and definite meaning set forth above

94. Of the twenty times the term "schedule" appears in the '078 patent specification, the first nineteen uses are in the same context that the term "schedule" is used in Claims 3 and 6.

95. The sole use of the term "schedule" within the specification in an alternate context may be found at 5:4. The usage appears at the end of a 21-line paragraph (4:50-5:4) that thoroughly sets the context - to refer to the collection of control codes stored in a remote control device for a video cassette recorder - leaving no room for confusion on the part of a person of ordinary skill in the art. The plain words of the specification show that this use of the term "schedule" is contextually different than the other nineteen uses of the term "schedule" in the specification and the uses of that term in the claims. A person of ordinary skill in the art would thus have no difficulty distinguishing between this "remote control schedule" and the "schedule of the television programming" of Claim 3.

96. My opinion that the term "schedule," as used in the context of Claim 3 of the '078 patent, has a specific and definite meaning to persons of ordinary skill in the art is further supported by the consistent use of the term elsewhere in the art. For example, Mr. Levine's earlier patent (U.S. Patent No. 4,908,713), which is discussed in the prosecution history of the '078 patent, "discloses a system for providing a schedule of future video programming available to a video recorder . . ." As another example, U.S. Patent No 4,706,121 to Young (discussed below), repeatedly uses the term "schedule information" in a manner similar to the "schedule of the television programming" of Claim 3 of the '078 patent.

97. Dr. Tjaden's arguments concerning Claim 1, Tjaden Report at 21 ¶ 50 ("I am unable to determine how the 'information received' in Claim 3 differs from that required by claim element 1.5"), do not support his assertion that the term "schedule," as it appears in Claims 3 and 6, is indefinite. Claim 1 simply requires the receipt of "information specific to the type of programming available to the particular viewing location " This "information" is broader than the "schedule" of Claim 3. Claim 1 also contemplates programming information in addition to schedule, including, for example, synopses, actor credits, whether the program is a rerun, and/or VCR Plus+ code.

98. In my opinion, it is clear that the "schedule" of Claim 3 is one type of the "information" called for by Claim 1. A person of ordinary skill in the art would thus understand what is claimed by Claim 3 of the '078 patent.

D. The Asserted Claims of the Patent-In-Suit Are Enabled

99. I understand that the disclosure in a patent must be sufficient: (1) to show that the inventor was in possession of the full scope of his invention at the time of disclosure; and (2) to enable one of ordinary skill in the art to practice the claimed invention without undue experimentation.

100. In his Report, Dr. Tjaden has asserted "that claims 1, 6 and 8 (the asserted independent claims) are each invalid due to lack of enablement." Tjaden Report at 21 ¶ 52. Specifically, Dr. Tjaden has stated:

> The information specific to the type of programming available to a particular viewing location cannot be determined solely from the geographical information transmitted; whenever more than one programming source is offered in a location (which I understand to be the case for the vast majority of locations), the programming source must also be identified. Indeed, dependent claim 2 (and also claim 7) adds the limitation that the information transmitted must include Zip Code, and the patentee has admitted that Zip Code itself is often not specific enough to determine the programming available to the particular viewing location (see '078 at 3:50-54). And, at the time of the invention, a skilled artisan would have known that information other than just geographical information would be required to identify the programming available to the particular viewing location. However, because only geographic information is transmitted to the program schedule information source (in claim elements 1.4, 6.3 and 8.4, respectively), the information received in return will at least sometimes contain information in addition to that specifically available to the viewing location. Therefore, in order for the claimed system to meet its objective of automatically controlling a VCR to record television programming (see, for example, '078 at Abstract), the application residing within the "computerized unit" or "controller" of these claims must necessarily include functionality to search the received information to extract only that programming information broadcast to the television receiver of the viewing location, or otherwise identify the programming source. This functionality is not taught in the patent description. Furthermore, it would not have been obvious to a skilled artisan, based upon the patent description, how to implement such functionality. Therefore I conclude that claims 1, 6 and 8 are invalid because they are not enabled.

Id. at 21-22 ¶ 52.

101. I disagree. As an initial matter, Dr. Tjaden's assumption that the Claim requires that "the type of programming available to a particular viewing location ... be determined ***solely*** from the geographical information transmitted" (emphasis added) is inconsistent with the claim language. The preamble to Claim 1 recites a "method comprising the steps of:"[9] I understand that "comprising" is a term of art in patent law that requires the

[9] Similar "comprising" language is used in Claims 6 and 8.

existence or performance of the claimed elements or steps but permits the existence or performance of additional elements or steps. Based on this understanding, it is my opinion that a system used for performing the method of Claim 1 could call for the transmission of additional information, if necessary. Dr. Tjaden's use of the term "solely" is therefore inaccurate.

102. The '078 patent teaches at 3:50-54 that the identification of provider (or headend) information may be needed in many, but not all, geographic locales to identify precisely the television programming available to the particular viewing location. Nonetheless, the provision of geographic information by itself will be sufficient to yield a set of television programming information that is at least limited to what is available in the designated locale. For example, some geographic locales have no broadcast television service and are served by only one cable provider; others are not served by any cable provider, but may receive broadcast television service. In such cases, geographic information alone may be sufficient to obtain an appropriate set of television programming information.

103. Further, Dr. Tjaden's assertion that "it would not have been obvious to a skilled artisan, based upon the patent description, how to implement such functionality" is inconsistent with the patent. The "functionality" that Dr. Tjaden describes can be implemented by the mechanism that Mr. Levine describes in the '078 patent specification at 3:50-54: "the computer operator keys in the postal ZIP code of his location and, if necessary, an identification of the cable service provider." In my opinion, this language fully enables a person of ordinary skill in the art to understand and practice the claimed inventions. With such language, Mr. Levine identified precisely the "information other than geographical information ... required to identify the programming available to the particular viewing location."

104. Dr. Tjaden, however, insists that the work of narrowing a superset of information received based on geographic information alone to only the "programming information broadcast to the television receiver of the viewing location" be performed locally by the user's computer. Dr. Tjaden then argues that a skilled artisan would not have known how to

accomplish the task of filtering down a superset of information to the precise set of information for programming available to the viewing location.

105. Again, I disagree. There is no reason to assume that any additional processes must be performed on the user's computer. As I have explained, the '078 patent specification expressly teaches the optional transmission of, for example, provider information. Even if such processes were required to be on the user's computer, which it is not, a skilled artisan who could recognize that need would surely be able to meet it using the resources available on the user's computer.

E. TMS's Revised Proposed Constructions/Supplemental Infringement Opinions

106. Since I completed my December 15, 2006 Expert Report, I have been presented with TMS' Revised Proposed Constructions of Disputed Claim Terms, dated January 18, 2007. Having considered TMS's revised constructions, I remain of the view that the asserted claims of the '078 patent are infringed by TMS's web site, www.zap2it.com.

1. Television viewing location/particular viewing location

107. TMS proposes that the phrase "television viewing location" or "particular viewing location" be construed as "the specific room within a building where a television set is positioned and watched by a user."

108 It is my opinion that this proposed construction is inconsistent with how a person of ordinary skill in the art would understand the language of the Claims of the '078 patent As I explained in my December 15, 2006 Expert Report (paragraph 45), the '078 patent specifically contemplates that the "information receiving device" may be in a separate room from the "television receiver" even though it is described as being at the "particular viewing location."

109. Additionally, it is my opinion that this construction is incorrect because it is premised on the unwarranted assumption that the television set is "watched" from the same

room in which it is "positioned." It is a common practice that a television set positioned in a den or living room may be watched from a kitchen or dining room. I do not see any justification in the '078 patent or its prosecution history for excluding this common circumstance from protection of the patent.

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111. For these reasons, even if TMS's newly proposed construction is adopted, my opinions concerning infringement of the Claims of the '078 patent are unchanged.

2. Operator input

112. It is my opinion that TMS's revised proposed construction for "operator input" is inconsistent with how a person of ordinary skill in the art would understand this term in the context of the '078 patent Claims. I do not see any justification in the '078 patent or its prosecution history for limiting operator input to devices for "manually" entering data. A person of ordinary skill in the art would understand that operator inputs exist in many forms and may accept operator commands by, for example, voice as well as by hand.

113. Nonetheless, even if TMS's newly proposed construction is adopted, my infringement opinions remain unchanged.

3. Database-type Manipulations

114. TMS now proposes that the phrase "receiving information specific to the type of programming available to the particular viewing location" be construed as "having data transferred to a computer such that a user can perform database-type manipulations on the transferred data without being connected to the original source of the data."

115. As a preliminary matter, it is my opinion that TMS's revised construction is inconsistent with how a person of ordinary skill in the art would understand the claims of the

'078 patent. The asserted Claims of the '078 patent do not make any reference to databases or "database-type manipulations of transferred data." Looking to the '078 patent specification, there are two contexts in which the term "database" is used: (1) when referring to the database at the data source; and (2) when referring to a database for controlling the operation of a television or a VCR-like device. A person of ordinary skill in the art would understand that the former context does not have any bearing on the user's ability to manipulate data on a local computer, and the second context bears only on Claim 9 of the '078 patent, which is not asserted. As a result, a person of ordinary skill in the art of the '078 patent would not understand the "receive/receiving" element of the asserted Claims to require an ability to perform database-type manipulations directly on the transferred data.

116. Second, even if TMS's newly proposed construction is adopted, one "database-type manipulation" of data contemplated by the '078 patent is the ability to scan through the "programming information" or "schedule" in the event that the full set of information is too voluminous to fit on a single computer screen. As I explained in my December 15, 2006 Expert Report, the television schedule information provided by the zap2it web site can be scanned while offline, i.e, without being connected to the original source of the data.

117. For these reasons, even if TMS's newly proposed construction is adopted, my opinions concerning infringement of the Claims of the '078 patent are unchanged.

4. Controller

118. It is my opinion that TMS's revised proposed construction for "controller" is inconsistent with how a person of ordinary skill in the art would understand this term in the context of the '078 patent Claims. I do not see any requirement in the '078 patent or its prosecution history that the claimed "controller" include all of the elements identified in TMS's revised construction.

119. Nonetheless, even if TMS's newly proposed construction is adopted, my infringement opinions remain unchanged.

5. Controller Programmed Prior To Use

120. TMS now proposes that the phrase "Controller being programmed to perform" be construed as "Computer application programs are installed on the 'controller,' as defined above, prior to its use by a user to perform "

121. A person of ordinary skill in the art would understand that it is tautological that a computer must be programmed to execute a function before it can actually execute that function. General purpose computers (or "controllers") are devices that can perform a wide variety of functions, but only in response to specific programming for each function

122. I suspect, however, that TMS intends for its proposed "prior to use" construction to be viewed more narrowly, such that any and all application program(s) necessary to perform the claimed functions must be installed prior to the user turning on his computer (before he later transmits his geographical information and receives television programming information). In my opinion, such a construction is inconsistent with how a person of ordinary skill in the art would understand the language of Claim 8 of the '078 patent.

123. Nonetheless, even if TMS's proposed construction is adopted and understood in a narrow sense, as I explained in my December 15, 2006 Expert Report, the user's computer is, in fact, programmed to perform each of the functions listed in Claim 8 of the '078 patent prior to the actual performance of each function. Specifically, the Internet browser program required to establish a connection to TMS's zap2it web site is "installed" on each user's computer before it is used. Thereafter, TMS's web pages are "installed" on the user's computer prior to the actual transmission of geographic information or the reception of television programming information.

124. For these reasons, even if TMS's newly proposed construction is adopted, my opinions concerning infringement of the Claims of the '078 patent are unchanged.

6. Information regarding the geographical location of a particular viewing location

125. It is my opinion that TMS's proposed construction for "information regarding the geographical location of a particular viewing location" is inconsistent with how a person of ordinary skill in the art would understand this term in the context of the '078 patent Claims. The definition provided by TMS is overly broad, referring to "portion of the planet," which may be effectively unrelated to the "particular viewing location."

126. Nonetheless, even if TMS's newly proposed construction is adopted, my infringement opinions remain unchanged.

7. Schedule of the Television Programming

127. It is my opinion that TMS's proposed construction for "Schedule of the television programming" is inconsistent with how a person of ordinary skill in the art would understand this term in the context of the '078 patent Claims. The distinction between a "list" and a "schedule" is that a schedule is ordered in some way. A bus schedule or a train schedule without any order would be all but useless. In the case of a "schedule of television programming" a person of ordinary skill in the art would expect that the list of television programs is commonly ordered by time Also, TMS's proposed construction is broad enough to cover, for example, a news report or gossip column that mentions that a television program is being moved to a new time slot But a person of ordinary skill in the art would not consider such unorganized information to be a "schedule."

128 Nonetheless, even if TMS's newly proposed construction is adopted, my infringement opinions remain unchanged.

8. Receive Information Through the Operator Input

129. TMS now proposes that the phrase "receive information through operator input" be construed as "signals produced by the operator input in response to user actions and transferred to the controller in the electronic terminal unit."

130. It is my opinion that this proposed construction is inconsistent with how a person of ordinary skill in the art would understand this phrase in the context of the '078 patent. Specifically, this construction is incomprehensible, and I find no support in the '078 patent or its prosecution history for it.

131. Nonetheless, even if TMS's proposed construction is adopted, the TMS zap2it web page programs the user's computer to "receive information through the operator input" even on those occasions when the user can also rely on a cookie to fill in the ZIP code of the viewing location.

132. For these reasons, even if TMS's newly proposed construction is adopted, my opinions concerning infringement of the Claims of the '078 patent are unchanged.

V. CONCLUSIONS

133. In view of the foregoing, I conclude that none of the asserted claims of the '078 patent is invalid and that even under TMS's revised and newly proposed claim constructions, the asserted claims of the '078 patent are infringed.

VI. PREVIOUS TESTIMONY

134. I have previously testified at trial in the following cases.

BCE Emergis Corporation v. Community Health Solutions of America, et al. United States District Court, Western District of Texas, Austin Division, Case No. A-02-CA-741-JN, February, 2004.

Kermit Aguayo and Khan N. Tran v. Universal Instruments Corporation United States District Court, Southern District of Texas, Houston Division C.A. NO. H-02-1747, August, 2004.

135. I have previously testified by deposition in the following cases:

BCE Emergis Corporation v. Community Health Solutions of America, et al. United States District Court, Western District of Texas, Austin Division, Case No. A-02-CA-741-JN, January, 2004

Kermit Aguayo and Khan N. Tran v. Universal Instruments Corporation United States District Court, Southern District of Texas, Houston Division C.A. NO. H-02-1747, April, 2004.

The Chamberlain Group, Inc. and Johnson Controls Interiors, LLC v. Lear Corporation and Ford Motor Company United States District Court, Northern District of Illinois, Eastern Division, Civil Action No. 1:05-CV-3449, January, 2006.

b-50.com, LLC v. Xformity, Inc. United States District Court, Northern District of Texas, Dallas Division, Civil Action No. 3:04-CV-0542-B, March, 2006.

Hyperion Solutions Corporation v. OutlookSoft Corporation United States District Court, Eastern District of Texas, Marshall Division, Case No. 2:04-CV-436 (TJW), June, 2006

VI. TRIAL EXHIBITS

136. I may rely on visual aids and demonstrative exhibits that demonstrate the bases of my opinions and that may assist me in explaining the technical subject matter that I expect to testify about. Examples of these visual aids and demonstrative exhibits may include, for example, claim charts, patent drawings, excerpts from patent specifications, file histories, interrogatory responses, deposition testimony and deposition exhibits, as well as charts, diagrams, videos, models, test samples and specimens, and animated or computer-generated video presentations describing the technology relevant to the asserted claims and the accused products and processes.

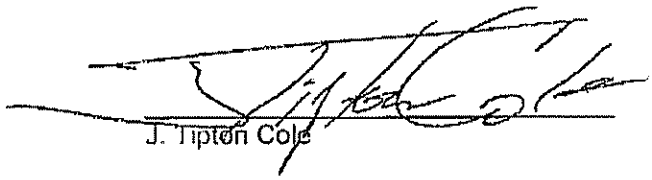
137. I have not yet prepared any exhibits for use at trial as a summary, or in support, of the opinions expressed in this report, but I expect to do so in accordance with the Court's scheduling orders.

VII. COMPENSATION

138. Since July 2006, I have been retained by Ropes & Gray LLP as an expert consultant to TV Guide in connection with this action. Under the terms of my agreement with

Ropes & Gray LLP, I am to be paid an hourly rate of $475, plus necessary and reasonable disbursements for my work. I receive no other compensation for my work on this action.

February 9, 2007



J. Tipton Cole

Exhibit A – Documents Reviewed[1]

DISCOVERY MATERIALS

U.S. Patent Number 5,988,078 and prosecution history (TG000507-2988)

B. Schepp and D. Schepp, *The Complete Guide to CompuServe*, Osborne McGraw-Hill, 1990 (TMS 0058354; also TMS 0001210-30)

CompuServe Information Service Today, Jan. 1982 (TMS 0001076-83)

Alfred Glossbrenner's Master Guide to CompuServe, 1987 (TMS 0054630-45)

Online Today, Jan. 1985 (TMS 0054628-29)

J. Tydeman, et al., *Teletext and Videotex in the United States: Market Potential, Technology, Public Policy Issues*, McGraw-Hill Publications Co., 1982 (TMS 0062508)

U.S. Patent Number 4,706,121 (TMS 0001291-319)

U.S Patent Number 4,787,063 (TMS 0000233-46

The Personal Entertainment Guide User's Guide Version 1.0, Lookahead Communications Inc., 1991 (TMS 0001105-86)

J.L. Viescas, *The Official Guide to the Prodigy Service*, Microsoft Press, 1991 (TMS 0062509)

Efrem Sigel, *The Future of Videotext*, Knowledge Industry Publications, Inc., 1983 (TMS 0068063)

Viewdata and Videotext, 1980-81: A Worldwide Report, Knowledge Industry Publications, Inc., 1980 (TMS 0068093-718)

DEPOSITIONS

Deposition of Mark Kaplinsky, October 5, 2006

PLEADINGS AND PROCEEDINGS

TMS' Revised Proposed Constructions of Disputed Claim Terms, dated January 18, 2007

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[1] Additional materials I have considered in this case are identified in Exhibit E to my December 15, 2006 Expert Report

CERTIFICATE OF SERVICE

I hereby certify that on February 9, 2007 true and correct copies of the Rebuttal Expert Report of J. Tipton Cole Concerning Validity were caused to be served on counsel of record at the following addresses as indicated:

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IN THE UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

CERTIFICATE OF SERVICE

I hereby certify that on February 21, 2007, I electronically filed the foregoing document with the Clerk of Court using CM/ECF which will send notification of such filing(s) and Hand Delivered to the following:

Richard K. Herrmann, Esquire
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I hereby certify that on February 21, 2007, I have sent by Electronic Mail, the foregoing document to the following non-registered participants:

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