EXHIBIT A

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Apple Inc., Google Inc., and Motorola Mobility LLC
Petitioners

v.

Arendi S.A.R.L.
Patent Owner

Patent No. 7,917,843
Issue Date: March 29, 2011
Title: METHOD, SYSTEM AND COMPUTER READABLE MEDIUM FOR ADDRESSING HANDLING FROM A COMPUTER PROGRAM

Inter Partes Review No. _____

PETITION FOR *INTER PARTES* REVIEW

UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 *et seq.*

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Exhibit Description	Exhibit #
U.S. Patent No. 7,917,843 to Hedloy	*1001*
Declaration of Dr. Daniel A. Menascé	*1002*
Amendment in prosecution of '854 patent dated January 24, 2008	*1003*
Office Action in prosecution of '843 patent dated October 28, 2010	*1004*
Applicant's response in prosecution of '843 patent dated December 8, 2010	*1005*
SIGCHI Bulletin (April 1998) at 51-63	*1006*
U.S. Patent No. 5,946,647 to Miller et al.	*1007*
U.S. Patent No. 5,644,735 to Luciw et al.	*1008*
U.S. Patent No. 5,859,636 to Pandit	*1009*
SIGCHI Bulletin (April 1998) at 51-63 (web version)	*1010*

Petitioners Apple Inc., Google Inc., and Motorola Mobility LLC (collectively, "Petitioners") respectfully petition for *inter partes* review of claims 1-44 of U.S. Patent No. 7,917,843 ("the '843 patent" (Ex. 1001)) in accordance with 35 U.S.C. §§ 311-319 and 37 C.F.R. § 42.100 *et seq*.

I. NOTICES AND STATEMENTS

Pursuant to 37 C.F.R. § 42.8(b)(1), Apple Inc. ("Apple") is the real party-in-interest for Petitioner Apple. Google Inc. ("Google") is the real party-in-interest for Petitioner Google. Motorola Mobility LLC ("Motorola Mobility") is the real party-in-interest for Petitioner Motorola Mobility.

Pursuant to 37 C.F.R. § 42.8(b)(2), Petitioners identify the following related matters. On November 29, 2012, the Patent Owner filed suit against Apple and Motorola Mobility, among others, in the U.S. District Court for the District of Delaware alleging infringement of several patents, including the '843 patent. *See Arendi S.A.R.L. v. Apple Inc.*, No. 1:12-cv-01596-LPS (D. Del.); *Arendi S.A.R.L. v. Motorola Mobility LLC*, Case No. 1:12-cv-01601-LPS (D. Del.). The Complaint was served on Motorola Mobility on November 30, 2012 and on Apple on December 3, 2012. Thus, this Petition has been filed within one year of Apple and Google (which owns Motorola Mobility) being served a complaint alleging infringement of the '843 patent. 35 U.S.C. § 315(b); 37 C.F.R. § 42.101(b).

Pursuant to 37 C.F.R. § 42.8(b)(3), Apple identifies the following counsel (and a power of attorney accompanies this Petition).

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Pursuant to 37 C.F.R. § 42.8(b)(4), service information for lead and back-up counsel is provided above.

Pursuant to 37 C.F.R. § 42.104(a), Petitioners certify that the '843 patent is available for *inter partes* review and that Petitioners are not barred or estopped

from requesting an *inter partes* review challenging the patent claims on the grounds identified in this Petition.

II. INTRODUCTION

The '843 patent is directed to a method, system, and computer readable medium for name and address handling from a computer program. For example, a user can type a name into a document being created with a word processing program. Through the use of a button, the document is analyzed and the name is detected. The detected name is then used to search for information related to the name, such as an address associated with the name. If the search finds related information an action is performed using at least part of the related information. For example, the address located may be inserted into the document.

Petitioners present herein references (including several originating from Apple) that anticipate or render obvious the challenged claims of this Petition. The references make clear that the purported invention of the challenged claims was well known before the '843 patent. (Three other petitions, also filed concurrently, address related U.S. Patent Nos. 7,496,854 and 8,306,993.) Section III of this Petition summarizes the '843 patent and relevant aspects of its prosecution history. Sections V-IX set forth the detailed grounds for invalidity of the challenged claims. This showing is accompanied by the Declaration of Dr. Daniel A. Menascé

("Menascé Decl.," Ex. 1002.) Accordingly, Petitioners respectfully request a Decision to institute *inter partes* review.

III. SUMMARY OF THE '843 PATENT

A. Background Of The '843 Patent

The '843 patent is directed to name and address handling within a document created by a computer program, such as a word processing program. (1:18-26.) One aspect relates to inserting information from a database into a document. This is described in connection with the left side of the flow charts of Figs. 1 and 2 and Examples 1, 5 and 7. Another aspect relates to adding data from a document into a database. This is described in connection with the right side of Figs. 1 and 2 and Examples 2-4 and 6. Dr. Menascé's Declaration (Ex. 1002) includes highlighted copies of Fig. 1 corresponding to various examples.

The claims of the '843 patent are specifically focused on finding information related to the contents of a document and performing an action using that information. (3:42-66.) Displaying an address and inserting an address into the document are the only actions disclosed in the '843 patent that use information located by a search.

Example 1 relates to searching for and inserting an address into the document. Fig. 3 (below) illustrates a document into which a name 40 has been entered. (5:63-65.) The user presses a "OneButton" button 42. (5:65-6:3; Fig. 1 at

2.) A program then analyzes what the user has typed into the document to detect certain types of information. (4:25-39; Fig. 1 at 4.) There is no disclosure as to how this analysis is accomplished.

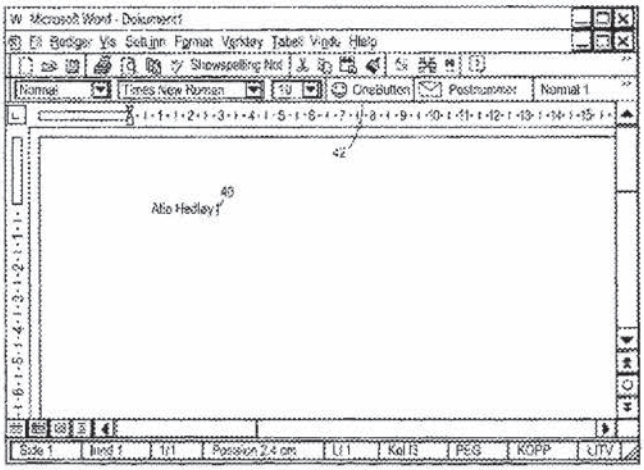


FIG. 3

Upon detection, the name is searched in a database. (5:65-6:3; Fig. 1 at 12.) If the search returns one matching contact with only one address, the address is inserted into the document, as shown in Fig. 4. (5:65-6:3; Fig. 1 at 22.) If multiple matching contacts are found, the user is prompted to select an address for insertion into the document. (7:33-49; Fig. 10; Fig. 1 at 20 and 22.)

B. Prosecution History Of The '843 Patent

The '843 patent is a continuation of U.S. Patent No. 7,496,854 ("the '854 patent"). Throughout the prosecution of the '854 patent, Applicant argued that the distinguishable feature over the applied art, including U.S. Patent No. 5,859,636 to Pandit, was marking information or identifying information, such as a name and

address in a document, "without user intervention." (*See, e.g.*, Amendment dated January 24, 2008, at 31 (Ex. 1003).)

However, during the prosecution of the '843 patent, the recitation of marking or identifying without user intervention was dropped. In an Office Action dated October 28, 2010, at 32 (Ex. 1004), the Examiner cited Pandit as pertinent to Applicant's disclosure. Applicant responded on December 8, 2010 (Ex. 1005) by *broadening* the claims from analyzing a "document to identify any first information that can be searched for" to analyzing "first information from the document." Applicant explained at page 15 of the Amendment:

> Applicant believes that the original claims were patentable over the cited prior art at least because none of the cited references discloses "analyzing a document to identify any first information", as required by the claims. [¶] Accordingly, Applicant now amends the claims, not to overcome the cited prior art, but instead to provide more context and clarity to the claims. In fact, *the limitation described in the previous paragraph has been amended out of the claims, which, in that respect, broadens the claims*. (Emphasis added)

As set forth below, by broadening the claims Applicant read them onto prior art, such as Pandit.

IV. CLAIM CONSTRUCTION

Petitioners note that a claim is given the "broadest reasonable construction in light of the specification" in *inter partes* review. *See* 37 C.F.R. § 42.100(b).

A. "An Input Device, Configured By The First Computer Program"

The recitation "an input device, configured by the first computer program" appears in numerous independent claims. (*See* claims 1, 20, 23, 42.) However, the specification gives no guidance regarding how the input device is *configured by* the first computer program. The specification at 3:35-41 only explains that "single button addressing is achieved by providing an input device, such as a touch screen, keyboard, icon, menu, voice command device, etc. (hereinafter called 'button'), in a computer program, such as a word processing program, spreadsheet program, etc. (hereinafter called 'word processor'), for executing address handling therein." Then, in every embodiment, the specification presents "One Button" 42 as the input device. (*See, e.g.*, Figs. 3-5; 1:60-64; 2:51-54; 3:35-48; 5:63-6:3; 10:8-14.) Therefore, according to the broadest reasonable construction consistent with the specification, the first computer program provides an interface to receive the user command. (Menascé Decl. ¶¶ 49-51.)

B. Remaining Claim Terms

Petitioners submit that the remaining claim terms should be accorded their ordinary and customary meaning as understood by one of ordinary skill in the art.

V. IDENTIFICATION OF CHALLENGE

Pursuant to 37 C.F.R. § 42.104(b), Petitioners respectfully request the cancellation of claims 1-44 of the '843 patent based on the following references.

Reference	Designated Name/Exhibit No.
SIGCHI Bulletin (April 1998) at 51-63	LiveDoc/Drop Zones (Ex. 1006)
U.S. Patent No. 5,946,647 to Miller et al.	Miller (Ex. 1007)
U.S. Patent No. 5,644,735 to Luciw et al.	Luciw (Ex. 1008)
U.S. Patent No. 5,859,636 to Pandit	Pandit (Ex. 1009)

The statutory grounds for the challenge of each claim are set forth below. All the statutory citations are pre-AIA.

Ground	35 USC	Claims	References
1	103(a)	1-44	LiveDoc/Drop Zones
2	103(a)	1-44	Miller
3	103(a)	1-7, 10-29, and 32-44	Luciw
4	103(a)	1, 2, 8, 14-17, 20, 21, 23, 24, 30, 36-39, 42, and 43	Pandit

Below is a discussion of why the challenged claims of the '843 patent are unpatentable under the statutory grounds raised, including claim charts specifying where each element of a challenged claim is met by the prior art. 37 C.F.R. § 42.104(b)(4). The showing in these sections establishes a reasonable likelihood of prevailing as to each ground of invalidity with respect to the challenged claims

as to that ground. This showing is accompanied by the Declaration of Dr. Daniel A. Menascé (Ex. 1002), as noted above.

VI. GROUND 1: OBVIOUSNESS OF CLAIMS 1-44 IN VIEW OF LIVEDOC/DROP ZONES

A. Background Of LiveDoc/Drop Zones

The April 1998 issue of SIGCHI Bulletin was dedicated to Apple's Advanced Technology Group. The Bulletin included an introduction section and two articles, by James Miller and Thomas Bonura, describing an Apple technology that allowed documents to reveal structures for identification and action. The articles are entitled "From Documents to Object: An Overview of LiveDoc" and "Drop Zones: An Extension of LiveDoc" and are sequential in the SIGCHI Bulletin from pages 53-63 (collectively, "LiveDoc/Drop Zones"). LiveDoc/Drop Zones thus qualifies as prior art under § 102(a) based on the earliest alleged U.S. filing date of the '843 patent.

LiveDoc/Drop Zones discloses creating and displaying a document using a text entry application program, such as shown in Fig. 2 of Drop Zones below.[1] (LiveDoc at 53-55; Drop Zones at 59-60.)

[1] Fig. 2 is from a website posting (Ex. 1010) of Drop Zones and is identical in content to the Drop Zones publication accompanying this Petition.

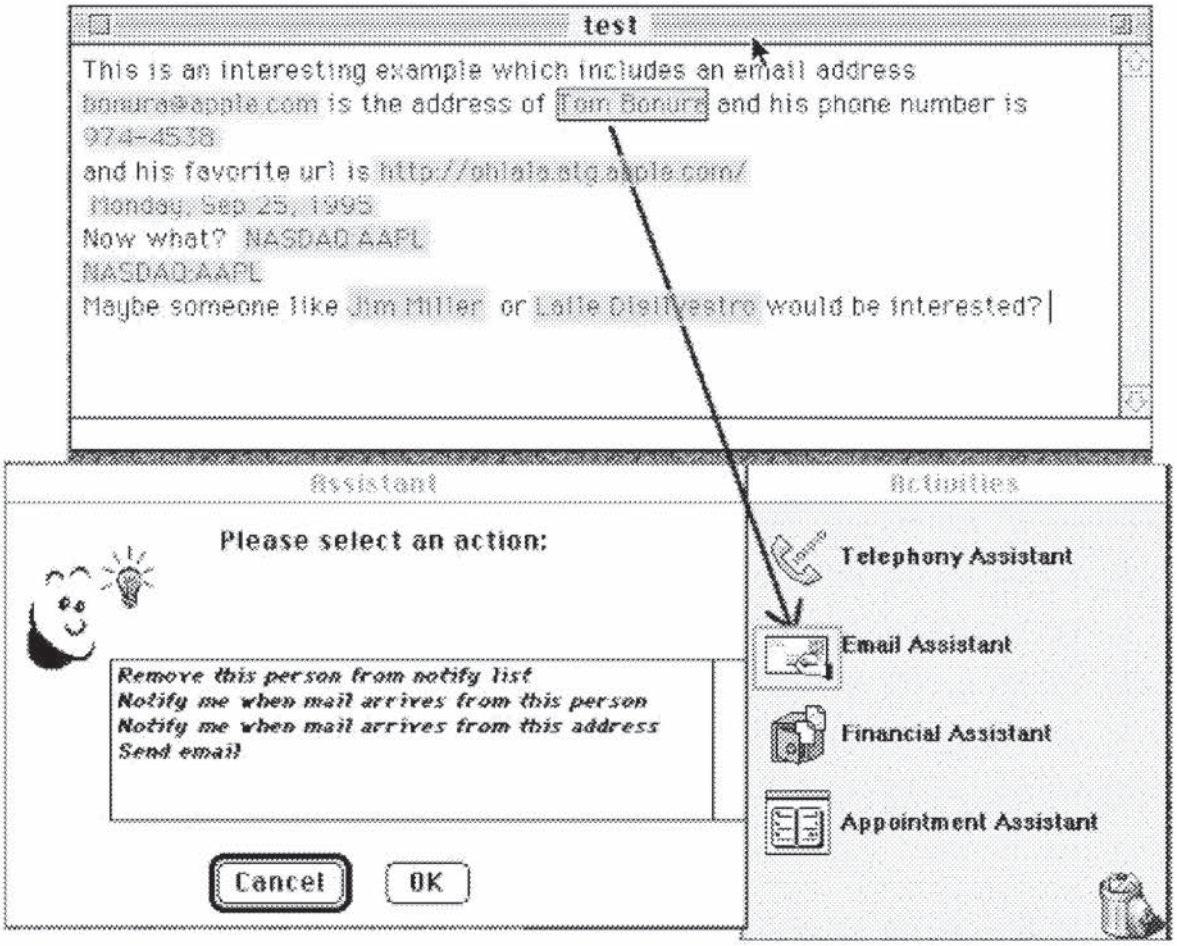


Figure 2: A user interaction with Drop Zones

The word processor is enabled with LiveDoc and its "structure detection process." (Live Doc at 55 ("[W]e decided to modify a simply text editor application, SimpleText, to be a LiveDoc client."); Drop Zones at 60 (referring to a "LiveDoc enabled word processor, *LiveSimpleText*").) Accordingly, while the document in *LiveSimpleText* is being displayed, LiveDoc's process runs in the background and highlights information in the document that can be used to

perform a related action. (LiveDoc at 54-55.) In Fig. 2 above, names, telephone numbers, dates and stock information have been detected in the document.

When the user selects a highlighted structure, the Drop Zones "Assistants" determine if they can perform an action based on the selected information. (Drop Zones at 60-61.) This determination is made by searching a database for information related to the selected structure. (*Id.*) For example, when the user selects the name "Tom Bonura" in Fig. 2, the Email Assistant searches a database for an email address associated with Tom Bonura. (*Id.*) If an email address is located, the Email Assistant enables the user to perform various actions using the email address, such as sending an email. (Fig. 2 ("Send email").)

This is just one example. LiveDoc/Drop Zones discloses numerous examples and contemplates variations as discussed below and in the accompanying declaration of Dr. Menascé (Ex. 1002). For example, Drop Zones discloses detecting a telephone number and then searching an address book to obtain a name based on that number and, in turn, searching an address book to obtain an e-mail address for that name, to send an e-mail. (Drop Zones at 61.)

B. Method Claims

Set forth below is a claim chart that specifies where each element of method claims 1-22 is met by LiveDoc/Drop Zones. Any narrative discussion with respect

to obviousness for a given claim or claim element is provided directly under that claim or claim element with double line spacing.

Claim	LiveDoc/Drop Zones
[1a] 1. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	LiveDoc/Drop Zones is a computer-implemented method for performing actions related to contents of a document, including finding data related to information identified in the document. *See, e.g.*, LiveDoc at 53 ("There is a real opportunity to advance the computing field here, by bringing these two worlds together: by enabling an ordinary document, built with any application, to automatically offer users access to some of the meaningful bits of its content, and by helping users carry out appropriate actions on these objects."); at 58 ("Imagine a detector that finds the formula of an organic molecule in a document, and an action that presents a three-dimensional rendering of that molecule within the context of the document itself, rather than in a separate application."); Drop Zones at 61 ("Another call to the address book application, guided by another mapping rule, will return the email address for the identified person.").
[1b] displaying the document electronically using the first computer program;	Documents in LiveDoc/Drop Zones are displayed using a first computer program; for example, the document shown in Fig. 2 of Drop Zones is displayed using a text entry application program, *LiveSimpleText*. The text can includes names, addresses, telephone numbers, URLs and molecular formulas. *See also* LiveDoc at 58 and Fig. 2.
[1c] while the document is being displayed, analyzing, in a computer process, first information from the document to determine if the first information is at least one	While the document is being displayed, LiveDoc/Drop Zones analyzes the document's contents (first information) to determine if the document contains at least one of a plurality of types of information that can be used to perform a search. *See, e.g.*, LiveDoc at 55 ("In LiveDoc,

of a plurality of types of information that can be searched for in order to find second information related to the first information;	the structure detection process is run in the background on the visible document's text, whenever that document is presented or updated. … Pointing at a highlight and pressing the mouse button then displays the menu of actions that can be applied to the structure, as shown in Fig 2."); Drop Zones at 59 ("For example, the name 'Apple Computer, Inc.' could be associated with such actions as, 'Find the corporate headquarters on a map', 'Get Apple's corporate phone number', 'Get the current trading price of Apple stock', 'Get the people in my address book associated with Apple' and so forth.").
[1d] retrieving the first information;	LiveDoc/Drop Zones retrieves and highlights the first information. *See* claims 1c and 1e.
[1e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	LiveDoc/Drop Zones highlights detected information. *See, e.g.*, Live Doc at 55 ("The results of LiveDoc's analysis are then presented by visually highlighting the discovered structures with a patch of color around the structure."). When the user selects a highlighted structure (an input device) the system determines the related actions that can be performed (initiates an operation). *See, e.g.*, Drop Zones at 60 ("When an object is selected, it is sent to the Drop Zone control system. Each of the assistants determines if it is able to accept and act upon the set of currently selected objects."). *Configured by the first computer program* – LiveDoc/Drop Zones knows where to place the selectable highlights because the first application tells it where the structures are located in the document (*i.e.*, the input device is configured by the first computer program). *See, e.g.*, LiveDoc at 56 ("LiveDoc knows where these structures appear in the text passed to it … but it has no idea where in the window those characters physically appear, and, thus, where the highlights should

	appear: this is information held by the application, not by LiveDoc. Hence, LiveDoc must ask the application for the information about the structures it has found via a callback. Once this information is available, the highlights and their associated mouse-sensitive regions can be constructed."). *See* narrative below.

As discussed above, LiveDoc/Drop Zones discloses that the word processor passes text to LiveDoc, which identifies structures and their positions within text. However, LiveDoc does not know of their positions within a visible window, whereas a word processor is able to map positions in the text to positions in a visible window. Thus, it would have been obvious for LiveDoc to contact the word processor via callback and inform it of the position of the detected structures within text, such that the word processor would then construct the highlights (input device) by mapping positions in text to positions in the visible window. (Menascé Decl. ¶ 61.) This would have been a predictable modification of LiveDoc that was well within ordinary skill, in order to perform a known function of standard word processing programs. (*Id.*)

[1f] the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated	LiveDoc/Drop Zones uses the selected first information (*e.g.*, a name) to search an information source external to the document (*e.g.*, an address book) to find associated second information, such as an email address for the person identified. *See, e.g.*, Drop Zones at 59 ("For example, the name 'Apple Computer, Inc.' could be associated with such actions as, 'Find the corporate headquarters on a map', 'Get Apple's corporate phone number', 'Get the current trading price

with the search term in an information source external to the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	of Apple stock', 'Get the people in my address book associated with Apple' and so forth."); Drop Zones at 60-61 ("Another call to the address book application, guided by another mapping rule, will return the e-mail address for the identified person."); LiveDoc at 58 ("Imagine a detector that finds the formula of an organic molecule in a document, and an action that presents a three-dimensional rendering of that molecule within the context of the document itself, rather than in a separate application."). The type of second information depends on the type of first information. For example, if the first information is a company, second information can be a stock price; if the first information is a personal name, second information can be an email address.
[1g] (ii) performing an action using at least part of the second information;	LiveDoc/Drop Zones performs an action using the second information (*e.g.*, send an email to the email address retrieved or inserting a rendering of a molecule in the document). *See, e.g.*, Drop Zones, Fig. 2 ("send email"); Drop Zones at 60-61; LiveDoc at 58 and Fig. 2.
[1h] in consequence of receipt by the first computer program of the user command from the input device, causing a search for the search term in the information source, using a second computer program, in order to find second information related to the search term; and	As discussed in claim 1e, when a user selects a highlighted structure the system determines the related actions that can be performed. This determination is made by performing the search discussed in claim 1f—*e.g.*, searching an address book (information source) using an address book application (second computer program) to find the email address associated with an identified name. *See, e.g.*, Drop Zones at 61 ("When objects are selected, they are inspected by the assistants in the Drop Zone. These assistants are built around a collection of facts and axioms that determine whether and how they can operate in some meaningful way on various kinds of objects."). *See also* claims 1e and 1f.

[1i] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1g
[1j] wherein the action is of a type depending at least in part on the type or types of the first information.	The action performed depends on the type of first information. For example, retrieving a stock price of an identified company, sending an email to an identified person and providing a rendering of a molecule based on molecular formula. *See* claims 1f-1g.

2. A method according to claim 1, wherein the first information comprises at least one of name-, person-, company- and address-related information.	First information in LiveDoc/Drop Zones can be at least one of name- and company-related information. *See* claims 1c and 1f.

3. A method according to claim 2, wherein performing the action includes performing the action in the first computer program.	LiveDoc/Drop Zones discloses performing an action which includes displaying in the document a rendering of a molecule associated with a molecular formula identified in the document (*i.e.*, displaying is done in the first computer program). *See, e.g.*, LiveDoc at 58 ("However, other styles of interaction exist: Imagine a detector that finds the formula of an organic molecule in a document, and an action that presents a three-dimensional rendering of that molecule *within the context of the document itself*, rather than in a separate application."). (Emphasis added.)

4. A method according to claim 1, wherein performing the action includes performing the action in the first computer program.	*See* claim 3.

5. A method according to claim 4, wherein performing the action includes causing addition of at least part of the second information to the first information in the document.	LiveDoc/Drop Zones discloses adding a rendering of a molecule (second information) to the formula of the molecule (first information) in the document. *See* claim 3.

6. A method according to claim 4, wherein performing the action includes causing display of at least part of the second information.	LiveDoc/Drop Zones retrieves and displays information related to items identified in the document—*e.g.*, displaying retrieved contact information or displaying a rendering a molecule. *See also* claim 3.

7. A method according to claim 4, wherein performing the action includes causing display of at least part of the second information by the first computer program.	*See* claims 3 and 6.

8. A method according to claim 1, further comprising, providing a prompt for updating the information source to include the first information.	As show in Fig. 2 of Drop Zones, when a user drags highlighted information to an activity in the activities window, the assistant window prompts the user to select an action. *See, e.g.*, Drop Zones at 61 ("After the user drops the name on the E-mail Assistant, a set of actions that make sense for people are presented in the Assistant window."). If a user enters a name and phone number (first information), an available action is to add this information to an address book (*i.e.*, update the information source to include first information). *See, e.g.*, Drop Zones at 60 ("[T]hinking about the name of a person and a phone number … from the perspective of an address book easily leads to the interpretation, 'Add this person to my address book'.").

9. A method according to claim 1, further comprising, if the search is not successful, providing a prompt for updating the information source to include the first information.	When a user selects information in LiveDoc/Drop Zones the system searches a database for related information and provides actions accordingly. *See, e.g.*, Drop Zones at 61 ("Semantics and Representation" section). *See* narrative below.

It would have been obvious to one of ordinary skill in the art that a user would be prompted to update his/her address book (*i.e.*, "information source") to include the first information in the event of a search that does not find any information. This would have been simply a matter of common sense and common knowledge at the relevant time frame. (Menascé Decl. ¶ 62.) One of ordinary skill would have been able to apply a known technique (a prompt to update a data source) to the known method of LiveDoc to yield a predictable result. (*Id.*)

10. A method according to claim 1, wherein receipt by the first computer program of the user command precedes analyzing the document.	LiveDoc/Drop Zones discloses that analyzing the document (or the first information, as recited in independent claim 1) could be done in a number of ways, including "on demand" (*i.e.*, the user command precedes the analyzing). *See, e.g.*, LiveDoc at 56 ("LiveDoc works quietly in the background and displays the results of its analysis on demand, rather than performing the analysis on demand.").

11. A method according to claim 1, wherein analyzing the document is completed after the receipt of the user command is completed and before searching is initiated.	*See* claim 10.

12. A method according to claim 1, wherein the input device is a graphical input device.	The user selectable highlighted structures discussed in claim 1e is a graphical input device. *See* claim 1e.

13. A method according to claim 1, wherein the user command is the only command from a user necessary to initiate performing the operation.	The user's selection of a highlighted structure is the only command from a user necessary to initiate, *i.e.*, begin, performing an operation. *See* claims 1e and 1h.

14. A method according to claim 1, wherein the input device is a menu and the entry of the user command includes a user's selection of the menu and click on a menu choice from the menu.	In LiveDoc/Drop Zones the input device is a user selectable highlighted structure. *See* claim 1e. LiveDoc/Drop Zones discloses clicking on the highlight to display a menu of actions for user selection. *See, e.g.*, LiveDoc at Fig. 2; LiveDoc at 55 ("Pointing at a highlight and pressing the mouse button then displays the menu of actions that can be applied to the structure, as shown in Fig 2."); Drop Zones at 59 ("These actions can then be offered to users by visually highlighting the discovered structures and attaching pop-up menus to the highlights.").

15. A method according to claim 1, further comprising, if searching results in a plurality of distinct instances of second information, displaying such instances to enable user selection of one of them for use in performing the action.	As shown in Fig. 2 of Drop Zones, when a user drags and drops a person onto the Email Assistant they are provided a list of email related actions to select from, including "send email." *See also* Drop Zones at 61. *See* narrative below.

It would have been common knowledge that an address book could contain plural items of information such as plural email addresses (*e.g.*, work and personal), physical addresses (*e.g.*, home and/or work), telephone numbers (*e.g.*,

home, work, or mobile), etc. (Menascé Decl. ¶ 63.) If, for example, several email addresses were associated with a name (*i.e.*, "plurality of distinct instances of second information"), it would have been obvious to display the plural email addresses to enable to the user to select one of them (*i.e.*, "displaying such instances to enable user selection of one of them for use in performing the action."). This would have been simply a matter of common sense and common knowledge and there would have been design and market incentives to provide such functionality. (*Id.*) Once again, one of ordinary skill would have been able to apply a known technique (displaying for selection plural results of a search) to the known method of LiveDoc to yield a predictable result. (*Id.*)

16. A method according to claim 1, wherein the information source is associated with the second computer program and is available on the computer.	The system retrieves contact information from an address book associated with the address book application that is available on and through the computer. *See, e.g.*, Drop Zones at 61 ("Another call to the address book application, guided by another mapping rule, will return the email address for the identified person."). *See also* claim 1h.

17. A method according to claim 1, wherein the information source is associated with the second computer program and is available through the computer.	*See* claim 16.

18. A method according to claim 1, wherein performing the action includes causing insertion of at least part of the second information into the document.	LiveDoc discloses retrieving and inserting into the document a rendering of a molecule associated with a molecular formula identified in the document. *See, e.g.*, LiveDoc at 57 ("However, other styles of interaction exist: Imagine a detector that finds the formula of an organic molecule in a document, and an action that presents a three-dimensional rendering of that molecule within the context of the document itself, rather than in a separate application.").

19. A method according to claim 1, wherein performing the action includes causing insertion of at least part of the second information into the document by the first computer program.	*See* claim 18.

[20a] 20. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	*See* claim 1a.
[20b] displaying the document electronically using the first computer program;	*See* claim 1b.
[20c] while the document is being displayed, analyzing, in a computer process on the computer, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information, and	*See* claim 1c.
[20d] wherein the first information comprises at least one of name-, person-, company-, and address-related information;	*See* claim 2.
[20e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	*See* claim 1e.
[20f] the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the search term in a user editable information	*See* claim 1f. The user can add information to the address

source outside the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	book, thus it is user editable. *See* claim 8.
[20g] (ii) performing an action using at least part of the second information,	*See* claim 1g.
[20h] wherein the input device includes a menu;	*See* claim 14.
[20i] retrieving the first information;	*See* claim 1d.
[20j] in consequence of receipt by the first computer program of the user command, such user command including a user's selection of the menu and click on a menu choice from the menu,	*See* claim 14.
[20k] causing a search for the search term in the user editable information source, using a second computer program, in order to find second information related to the search term in the user editable information source; and	*See* claims 1f and 1h.
[20l] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1i.
[20m] wherein the action is of a type depending at least in part on the type or types of the first information and	*See* claim 1j.
[20n] performing the action includes at least causing display of at least part of the second information.	*See* claim 6.

21. A method according to claim 20, further comprising, if searching results in a plurality of occurrences of second information, causing display of such instances to enable user selection of one of them for use in performing the action.	*See* claim 15.

22. A method according to claim 20, wherein performing the action includes causing addition of at least part of the second information to the first information in the document.	*See* claim 5.

C. Computer Readable Medium Claims

Computer readable medium claims 23-44 would have been obvious in view of LiveDoc/Drop Zones. These claims correspond to method claims 1-22. LiveDoc/Drop Zones discloses or renders obvious the steps in the body of the

computer readable medium claims (as set forth above with respect to the corresponding method claims) and further discloses a computer readable medium including program instructions (*see, e.g.*, LiveDoc at 57 (referring to processors); Fig. 2 (illustrating a screen from an Apple computer)).

VII. GROUND 2: OBVIOUSNESS OF CLAIMS 1-44 IN VIEW OF MILLER

A. Background Of Miller

Miller was filed on February 1, 1996 and thus qualifies as prior art under § 102(e) based on the earliest alleged U.S. filing date of the '843 patent. Miller is assigned to Apple. Miller discloses displaying a document using a computer program, such as a word processor or e-mail program. (5:19-22; 3:36-38.) Fig. 5 below shows an exemplary document.

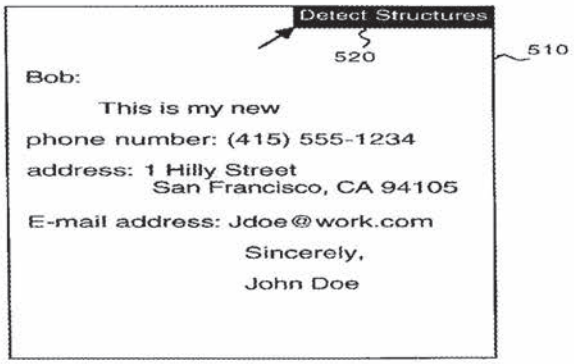
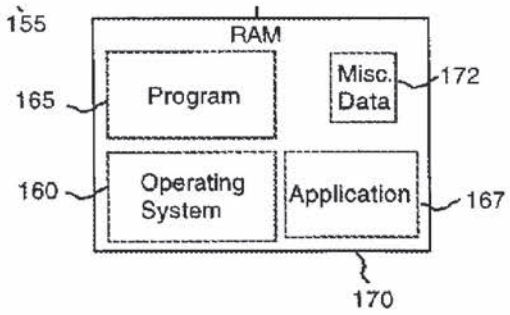


FIG. 5

A user then presses a "Detect Structures" button 520. (5:22-24.) This initializes a program 165 that is separate from the word processor program 167 or e-mail program creating the document as shown in a portion of Fig. 1 below. (5:22-37.)



While the document is being displayed, program 165 identifies the structures in the document such as the name John Doe. (Fig. 6; 5:25-37.) Fig. 4 shows examples of actions that can be taken depending on the type of information identified.

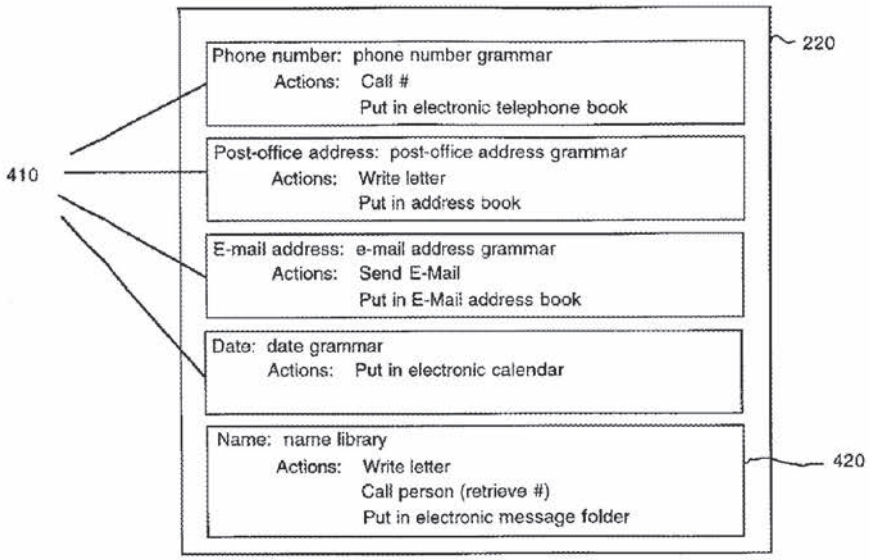


FIG. 4

For example, in the bottom box with the identified name, the actions are "Write letter" or "Call person (retrieve #)" with the identified name. (Fig. 4, 420.) In order to call the person, the name must be searched in an address book to retrieve the associated phone number, as contemplated in Fig. 4.

It must be emphasized that Miller's disclosure of detected structures and actions to be performed is not limited to Fig. 4. The figure provides just some examples of the many detections and corresponding actions available as understood by one of ordinary skill in the art as discussed below and in the accompanying declaration of Dr. Menascé (Ex. 1002).

B. Method Claims

Set forth below is a claim chart that specifies where each element of method claims 1-22 is met by Miller. Any narrative discussion with respect to obviousness for a given claim or claim element is provided directly under that claim or claim element with double line spacing.

Claim	Miller
[1a] 1. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	Miller discloses a computer-implemented method for performing actions related to contents of a document. *See, e.g.*, Abstract ("A system and method causes a computer to detect and perform actions on structures identified in computer data."). Some actions include finding data related to information identified in the document; for example, in Fig. 4 calling the person with the identified name involves retrieving the person's phone number. *See, e.g.*, Fig. 4, 420 ("retrieve #").
[1b] displaying the document electronically using the first computer program;	Documents are displayed using a first computer program, such as a word processor (application 167 in Fig. 1). *See, e.g.*, Figs. 1 and 5; 5:19-22 ("FIG. 5 shows a window 510 presenting an exemplary document 210 …"); 3:36-38 ("Application 167 is a program, such as a word processor or e-mail program, that presents data on

	output device 105 to user."). Output device 105 (Fig. 1) can be a CRT display device. 3:26-38.
[1c] while the document is being displayed, analyzing, in a computer process, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information;	While the document is being displayed, analyzer server 220 (running in a computer process) of computer program 165 analyzes the document to identify and determine the type of various first information, such as a phone number, post office address, e-mail address, and name. *See, e.g.*, Figs. 5 and 6; 3:61-64 ("Analyzer server 220 … uses patterns to parse document 210 for recognizable structures."); 5:19-36 ("… As illustrated in FIG. 6, analyzer server 220 identifies the phone number, post-office address, e-mail address and name…"). The information can be searched for in order to find second information related to the first information, such as a phone number related to a detected name. *See, e.g.*, Fig. 4, 420 ("retrieve #").
[1d] retrieving the first information;	Analyzer server 220 retrieves the first information and highlights the identified structures, as shown in Fig. 6. *See, e.g.*, 3:8-10 ("FIG. 6 illustrates a window with the identified structures in the example document of FIG. 5 highlighted based on the analyzer server of FIG. 4."). *See also* claim 1c.
[1e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	The "detect structures" button 520 in Fig. 5 is an input device that allows the user to enter a command to initiate the parsing operation. *See, e.g.*, 5:22-37 ("Window 510 includes a button 520 for initiating program 165…"). *See* narrative below.

It would have been obvious for the word processor program 167 to provide an interface, such as button 520, to receive a user command. (Menascé Decl. ¶ 71.) It was well known to configure word processing programs to add GUI elements, such as additional menu options or button, to provide desired

functionality. (*Id.*) This would have been a predictable modification of Miller that was well within ordinary skill to perform a known function of standard wording processing programs, with no unexpected results. (*Id.*)

[1f] the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the search term in an information source external to the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	First information such as a name is used as a search term to find second information such as a phone number which is external to the document. FIG. 4; Analyzer server 220 includes dictionaries or "grammars" that are external to the document. 5:6-18. FIGS. 8-10 and 5:51-6:55 describe recognizing patterns and performing actions. FIG. 10 and blocks 1050, 1060 describe linking actions associated with grammars. (6:38-46.) Different types of second information are dependent on type of first information, as shown in Fig. 4, *e.g.*, post office address would be linked to name for writing a letter and phone number is linked to a name to allow calling of a person. *See* narrative below.

[1g] (ii) performing an action using at least part of the second information;	An action such as calling a person using phone number is performed. *See, e.g.*, Figs. 4 and 9; 6:9-33 ("[I]f an action is selected 940, the action is executed 950 on the structure selected in block 920.").
[1h] in consequence of receipt by the first computer program of the user command from the input device, causing a search for the search term in the information source, using a second computer program, in order to find second information related to the search term; and	When the user selects the "detect structures" button 520, a search is performed . Program 165 is a second program and includes analyzer server 220 that performs the search discussed in claim 1f. (*See, e.g.*, 5:6-37; 3:52-4:10 ("After identifying structures and linking actions, application program interface 230 [of program 165] communicates with application 167 to obtain information on the identified structure so that user interface 240 can successfully present and enable

	selection of the actions"); *see also* claim 1f.)
[1i] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1g.
[1j] wherein the action is of a type depending at least in part on the type or types of the first information.	The available actions depend upon the type of first information, as shown in Fig. 4.

2. A method according to claim 1, wherein the first information comprises at least one of name-, person-, company- and address-related information.	First information in Miller can be at least one of name-, person-, and address-related information. *See, e.g.*, Fig. 4; 5:19-36 ("… As illustrated in FIG. 6, analyzer server 220 identifies the phone number, post-office address, e-mail address and name. …").

3. A method according to claim 2, wherein performing the action includes performing the action in the first computer program.	In Fig. 4, the action of "write letter" using an identified name is performed in the word processor program (first computer program).

4. A method according to claim 1, wherein performing the action includes performing the action in the first computer program.	*See* claim 3.

5. A method according to claim 4, wherein performing the action includes causing addition of at least part of the second information to the first information in the document.	Miller discloses the action "write letter" when either a name or address is identified. (Fig. 4.) *See* narrative below.

It would have been obvious to one of ordinary skill in the art that writing a letter (which is an exemplary "action" associated with a name in Fig. 4) could include adding/inserting the address (*i.e.*, "causing addition of at least part of the second information") to the corresponding name (*i.e.*, "first information") in the document, or *vice versa* as this would have been simply a matter of common sense and common knowledge at the relevant time frame. (Menascé Decl. ¶ 72.) Specifically, an address book contains this related information and it would have been logical to access it as a part of the action when writing a letter. Providing such functionality would have been a predictable modification of Miller well within ordinary skill. (*Id.*)

6. A method according to claim 4, wherein performing the action includes causing display of at least part of the second information.	Fig. 4 (identifying action of "Write letter" corresponding to identified name). *See* narrative below.

It would have been obvious to a person of ordinary skill in the art that writing a letter causes display of a name and corresponding address in a letter being written using the word processing program. This would have been a matter of common sense and knowledge, as name and address are standard elements of writing a letter. (Menascé Decl. ¶ 73-75.) Providing such functionality would have been a predictable modification of Miller well within ordinary skill. (*Id.*)

7. A method according to claim 4, wherein performing the action includes causing display of at least part of the second information by the first computer program.	*See* claim 6.

8. A method according to claim 1, further comprising, providing a prompt for updating the information source to include the first information.	When a user selects a detected structure, the system prompts the user to select a candidate action by displaying a pop-up menu of actions. *See, e.g.*, 4:27-31 ("Upon selection of this structure, user interface 240 presents and enables selection of the linked candidate actions using any selection mechanism, such as a conventional pull-down or pop-up menu."). As shown in Fig. 4, several of these actions update an information source to include first information (*e.g.*, put in address book). *See, e.g.*, Fig. 4; 5:6-18.

9. A method according to claim 1, further comprising, if the search is not successful, providing a prompt for updating the information source to include the first information.	*See* narrative below.

It would have been obvious that a user would be prompted to update his/her address book (*i.e.*, "information source") to include the first information if a search does not return a match. This would have been simply a matter of common sense and common knowledge at the relevant time frame. (Menascé Decl. ¶ 76.) One of ordinary skill would have been able to apply a known technique (a prompt to

update a data source) to the known method of Miller to yield a predictable result.

(*Id.*)

10. A method according to claim 1, wherein receipt by the first computer program of the user command precedes analyzing the document.	The user's selection of the "detect structures" button 520 precedes analyzing the document. *See e.g.*, 5:22-31 ("Window 510 includes a button 520 for initiating program 165… Upon initiation of program 165, system 100 transmits the contents of document 210 to analyzer server 220, which parses the contents based on grammars 410 and strings 420 (FIG. 4)."). *See also* claim 1e.

11. A method according to claim 1, wherein analyzing the document is completed after the receipt of the user command is completed and before searching is initiated.	*See* claim 10.

12. A method according to claim 1, wherein the input device is a graphical input device.	Button 520 is a graphical input device. *See* claim 1e.

13. A method according to claim 1, wherein the user command is the only command from a user necessary to initiate performing the operation.	There is no antecedent for "performing the operation." Selection of button 520 is the only command necessary to initiate, *i.e.*, begin, the operation. *See* claims 1e and 1h.

14. A method according to claim 1, wherein the input device is a menu and the entry of the user command includes a user's selection of the menu and click on a menu choice from the menu.	Miller discloses selection of the "detect structures" button. (5:22-31.) It also discloses a pop-up user menu. (*See* Fig. 7; 4:23-31; 5:38-40.) *See* narrative below.

It was common knowledge that commands can be selected via a button or via a pop-up menu (which are both disclosed in Miller). (Menascé Decl. ¶ 77.) Thus, it would have been obvious to a person of ordinary skill in the art that selection of the "detect structures" command could be made from a conventional menu, as a matter of user interface design. Providing such functionality would have been a predictable modification of Miller well within ordinary skill. (*Id.*)

15. A method according to claim 1, further comprising, if searching results in a plurality of distinct instances of second information, displaying such instances to enable user selection of one of them for use in performing the action.	Fig. 4 shows an action for calling a person with the identified name. *See* narrative below.

It would have been common knowledge that an address book would contain information such as plural email addresses (*e.g.*, work and personal), physical addresses (*e.g.*, home and/or work), telephone numbers (*e.g.*, home, work, or mobile), etc. (Menascé Decl. ¶ 78.) If, for example, several telephone numbers were associated with a name (*i.e.*, "plurality of distinct instances of second information"), it would have been obvious to display the plural phone numbers to enable to the user to select one to call (*i.e.*, "displaying such instances to enable user selection of one of them for use in performing the action."). This would have been simply a matter of common sense and common knowledge and there would

have been design and market incentives to provide such functionality. (*Id.*) One of ordinary skill would have been able to apply a known technique (displaying for selection plural results of a search) to the known method of Miller to yield a predictable result. (*Id.*)

16. A method according to claim 1, wherein the information source is associated with the second computer program and is available on the computer.	The information source, such as an address book, is associated with program 165 and is available on and through the computer. *See, e.g.*, 5:6-17, 44-50 ("Upon selection of the action for putting the number in an electronic telephone book, user interface 240 transmits the corresponding telephone number and selected action to action processor 250. Action processor 250 locates and opens the electronic telephone book, places the telephone number in the appropriate field and allows the user to input any additional information into the file.").

17. A method according to claim 1, wherein the information source is associated with the second computer program and is available through the computer.	*See* claim 16.

18. A method according to claim 1, wherein performing the action includes causing insertion of at least part of the second information into the document.	*See* claim 5.

19. A method according to claim 1, wherein performing the action includes causing insertion of at least part of the second information into the document by the first computer program.	*See* claims 5 and 7.

[20a] 20. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	*See* claim 1a.
[20b] displaying the document electronically using the first computer program;	*See* claim 1b.
[20c] while the document is being displayed, analyzing, in a	*See* claim 1c.

computer process on the computer, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information, and	
[20d] wherein the first information comprises at least one of name-, person-, company-, and address-related information;	*See* claim 2.
[20e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	*See* claim 1e.
[20f] the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the search term in a user editable information source outside the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	*See* claim 1f. The user can add information to the phone book. Thus it is user editable. *See* claim 8.
[20g] (ii) performing an action using at least part of the second information,	*See* claim 1g.
[20h] wherein the input device includes a menu;	*See* claim 14.
[20i] retrieving the first information;	*See* claim 1d.
[20j] in consequence of receipt by the first computer program of the user command, such user command including a user's selection of the menu and click on a menu choice from the menu,	*See* claim 14.
[20k] causing a search for the search term in the user editable information source, using a second computer program, in order to find second information related to the search term in the user editable information source; and	*See* claims 1f and 1h.
[20l] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1i.
[20m] wherein the action is of a type depending at least in part on the type or types of the first information and	*See* claim 1k.
[20n] performing the action includes at least causing display of at least part of the second information.	*See* claim 6.

21. A method according to claim 20, further comprising, if	*See* claim 15.

searching results in a plurality of occurrences of second information, causing display of such instances to enable user selection of one of them for use in performing the action.	

22. A method according to claim 20, wherein performing the action includes causing addition of at least part of the second information to the first information in the document.	*See* claim 5.

C. Computer Readable Medium Claims

Computer readable medium claims 23-44 would have been obvious in view of Miller. These claims correspond to method claims 1-22. Miller discloses or renders obvious the steps in the body of the computer readable medium claims (as set forth above with respect to the corresponding method claims) and further discloses a computer readable medium including program instructions (*see, e.g.*, Fig. 1 at 170).

VIII. GROUND 3: OBVIOUSNESS OF CLAIMS 1-7, 10-29, AND 32-44 IN VIEW OF LUCIW

A. Background Of Luciw

Luciw was filed on April 19, 1995 and thus qualifies as prior art under § 102(e) based on the earliest alleged U.S. filing date of the '843 patent. Luciw relates to Apple's pen-based, handheld Newton device developed in the 1990s. It discloses providing user assistance based on information entered into a document, such as a note area 54a, 54b displayed by a notepad application, as shown in Fig. 2 below. (2:19-22; 6:24-59.)

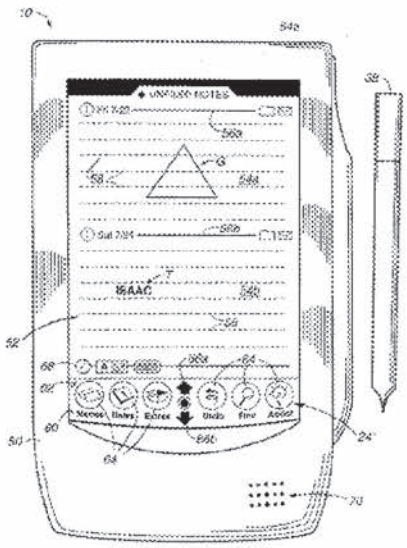


Figure 2

When the user selects the "explicit assist" button 64 in Fig. 2, the document is analyzed to determine what type of assistance, if any, is possible given the user's entry. (9:22-10:5; 13:52-14:4.) For example, if the user enters a first name, such as "Isaac," Luciw then searches a database and presents for user selection a list of persons with the full name identified as shown in Fig. 6b below. (11:60-12:6.)

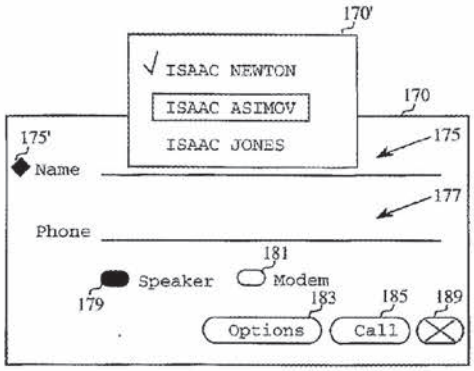


Figure 6b

When the user makes a selection, information associated with the person, such as the person's full name, is inserted into the document. (*Id.*; 12:41-54.)

It must be emphasized that Luciw's disclosure is not limited to Fig. 6b. The figure provides just one example of the identifications and corresponding actions available as understood by one of ordinary skill in the art as discussed below and in the accompanying declaration of Dr. Menascé (Ex. 1002).

B. Method Claims

Set forth below is a claim chart that specifies where each element of method claims 1-7 and 10-22 is met by Luciw. Any narrative discussion with respect to obviousness for a given claim or claim element is provided directly under that claim or claim element with double line spacing.

Claim	Luciw
[1a] 1. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	Luciw discloses a computer-implemented assistance method that finds data related to the contents of a document (*e.g.*, finding contact information for a person with the name entered in the document) using a computer program running on a computer. *See, e.g.*, 1:20-22; 11:60-12:6; 12:41-54.
[1b] displaying the document electronically using the first computer program;	Note areas 54a and 54b are documents displayed by the notepad application (first computer program). *See, e.g.*, 6:24-31 ("Additional note areas, such as a note area 54b, can be formed by the user by drawing a substantially horizontal line across the screen 52 with the stylus 38."); 6:49-59 ("The screen illustrated in FIG. 2 is referred to as the 'notepad', and is preferably an application program running under the operating system of the pen based computer system 10."); Fig. 2.
[1c] while the document is being displayed, analyzing, in a computer process, first	Luciw discusses entering information into a smart field whether in window 170 as in Fig. 4b or in the notepad application. *See, e.g.*, 8:15-18.

information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information;	Further, an implicit assist can also be indicated by writing in the notepad outside of a smart field. *See, e.g.*, 8:30-41 ("However, implicit assist may be indicated not just by entry of an indication in a smart field … [T]he writing of a particular indication or word on screen 52 outside of a particular smart field may trigger an implicit assist."). While the document is being displayed, the device in Luciw analyzes a user's entry (first information from the document) to determine if implicit assistance is possible and the kind of implicit assist indicated (determine whether first information can be used to find second information). *See, e.g.*, Figs. 3 and 4a; 10:15-20 ("If the entry in the smart field has been made by the user, the assistance process takes action to identify or recognize the kind of implicit assistance indicated at a step 154."); 8:7-13 ("At step 104, the process recognizes whether or not an implicit assistance function is to be provided by computer system 10. … If a user does enter information into a 'smart field,' the computer database will be queried at step 106 to determine whether assistance is possible given the user input.").
[1d] retrieving the first information;	The first information is retrieved to determine if implicit assist is possible. *See* claim 1c.
[1e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	Luciw provides an input device (the pen pointer and touch screen) configured by the first computer program that allows a user to write a command or hit a button to initiate an operation. Specifically, the user can initiate the assist operation by writing a particular word or hitting the "explicit assist" button. *See, e.g.*, 8:51-53 ("An example of an indication of user desire to have explicit assistance undertaken is the act of using pen 38 in FIG. 2 to tap or click on the assist

	icon or button 64 shown on the surface of stylus-sensitive membrane 62 …"); 8:30-41 ("However, implicit assist may be indicated not just by entry of an indication in a smart field … [T]he writing of a particular indication or word on screen 52 outside of a particular smart field may trigger an implicit assist."); Fig. 12c. *See* narrative below.

It would have been obvious for the notepad application to provide an interface, such as the "explicit assist" button, to receive a user command. (Menascé Decl. ¶ 89.) As shown in Fig. 2 of Luciw, the "explicit assist" button is provided at the bottom of screen 52, and the notepad application includes buttons on status bar 68. (*See also* 7:53-54 ("The various buttons of the status bar 68 are positioned in a third layer 'over' the second and root layers.").) Therefore, to any extent the "explicit assist" button is not provided in, and thus configured by, the notepad application, it would have been obvious to a person of ordinary skill in the art. (*Id.*) Having the notepad application configure a button would have been a predictable modification of Luciw that was well within ordinary skill, because configuring GUI elements, such as buttons, was a well-known function of word processing programs. (*Id.*)

[1f] the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the	The system in Luciw searches a database (external information source) using first information entered into a document, *e.g.*, a first name, for second information associated with the entry, *e.g.*, a last name. *See, e.g.* 10:49-11:39; 11:60-12:6 ("Responsive to the recognition of the name ISAAC, the assistance process has

search term in an information source external to the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	produced a list of alternatives by earlier query of the database per step 106 in FIG. 3."); 12:41-54 ("In the earlier example of FIG. 6c in which it was decided that Isaac Asimov was the desired ISAAC, the phone information in window 170 had not yet been entered. This information may be available and can be accessed according to the process of FIG. 8a. *The process starts at 200 and immediately checks the data base for any linked smart fields as indicated at 202.*") (emphasis added); Figs. 3 and 5. The system determines the action the user intends to take based on the categories of information entered. *See, e.g.*, 13:52-14:4; 9:46-48 ("Next, an attempt is made at step 135 to recognize the possible intent expressed by the objects entered into the assistance process."). As shown in Fig. 11c, performing actions requires different categories of information. *See, e.g.* 14:5-17. The system determines if any information required to perform the action is missing and retrieves it from the database. *See e.g.*, 15:8-13 ("The process calls for example for the filling in of a plan template and the identification of any missing preconditions, as set forth at step 292 of FIG. 13. Next, a step 293 resolves missing preconditions to the extent possible."). Thus, the action taken and the type of information retrieved (second information) depend on the type of information entered by the user (first information).
[1g] (ii) performing an action using at least part of the second information;	The system in Luciw presents for user selection a list of people with the first name identified. The system then inserts the full name (second information) of the person selected (*i.e.*, performing an action using the second information). *See, e.g.*, Figs. 6a-6c; 11:60-12:6 ("Responsive to the recognition of the name

	ISAAC, the assistance process has produced a list of alternatives by earlier query of the database per step 106 in FIG. 3. … The user-selected 'ISAAC ASIMOV' is shown having been marked for selection by a rectangle indicating a highlighting operation. FIG. 6c illustrates the completion of the selection process, with the full name in formal font of ISAAC ASIMOV being presented in the name field 175 of window 170."); 12:41-54.
[1h] in consequence of receipt by the first computer program of the user command from the input device, causing a search for the search term in the information source, using a second computer program, in order to find second information related to the search term; and	When the user enters information into a smart field or hits the explicit assist command, the system uses a second program, *i.e.*, a contact database, to search an information source to find related information. For example, the user enters "Isaac" in Fig. 6a and the system searches the contact database for persons with the first name Isaac. *See* claim 1f.
[1i] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1g.
[1j] wherein the action is of a type depending at least in part on the type or types of the first information.	*See* claim 1f.

2. A method according to claim 1, wherein the first information comprises at least one of name-, person-, company- and address-related information.	First information can be a name, such as "Isaac" in Fig. 6a. *See* claim 1f.

3. A method according to claim 2, wherein performing the action includes performing the action in the first computer program.	The information retrieved is inserted into the document and displayed by the first computer program. *See* claims 1b and 1g.

4. A method according to claim 1, wherein performing the action includes performing the action in the first computer program.	*See* claim 3.

5. A method according to claim 4, wherein performing the action includes causing addition of at least part of the second information to the first information in the document.	The last name and phone number are added to the first name in the document. *See, e.g.*, Figs. 6a-6c and 8b; 11:60-12:6 ("FIG. 6c illustrates the completion of the selection process, with the full name in formal font of ISAAC ASIMOV being presented in the name field 175 of window 170."); 12:41-63 ("If there are applicable smart fields which contain the desired phone number information, this data is obtained from the corresponding linked field types as suggested at 203. Then, as suggested at 206, the data obtained is entered into the applicable smart field of the window 170 under operation.").

6. A method according to claim 4, wherein performing the action includes causing display of at least part of the second information.	In Figs. 6b-6c a list of available "Isaacs" is displayed, and the user's selection is inserted into the document. *See* claim 1g. In Fig. 8b the associated phone number is inserted into the document (*i.e.*, displayed).

7. A method according to claim 4, wherein performing the action includes causing display of at least part of the second information by the first computer program.	Second information inserted into the document (*e.g.*, the last name or phone number) is displayed by the first computer program. *See* claims 1g and 5-6.

10. A method according to claim 1, wherein receipt by the first computer program of the user command precedes analyzing the document.	The user's selection of the "explicit assist" command precedes analyzing the document. *See, e.g.*, 9:16-10:5 ("If an explicit assist has been indicated at step 110, then a step 130 determines, if a particular selection as to the explicit assistance has been made. … If no user selection has been made, objects entered since a delimiter are entered into the assistant in a step 133. Since no objects have specifically been selected, the objects to be entered into the assistant are selected automatically by a delimiter process.").

11. A method according to claim 1, wherein analyzing the document is completed after the receipt of the user command is completed and before searching is initiated.	*See* claim 10.

12. A method according to claim 1, wherein the input device is a graphical input device.	The menu offering selection of several "Isaacs" and the explicit assist button are both graphical input devices. *See, e.g.*, Figs. 6b and 2; 3:14-20; 8:51-55.

13. A method according to claim 1, wherein the user command is the only command from a user necessary to initiate performing the operation.	Upon selection of the "explicit assist" command, the system automatically identifies the user assist information, such a first name. *See, e.g.*, 9:16-10:5 ("If an explicit assist has been indicated at step 110, then a step 130 determines, if a particular selection as to the explicit assistance has been made. … Since no objects have specifically been selected, the objects to be entered into the assistant are selected automatically by a delimiter process."). The system then automatically selects the person to search for contact information. *See, e.g.*, Figs. 7a-7c, 12:7-40. The database is then searched for related contact information to insert into the document. *See* claims 1f and 1g. Thus, selection of the "explicit assist" command is the only command necessary to initiate performing the operation.

14. A method according to claim 1, wherein the input device is a menu and the entry of the user command includes a user's selection of the menu and click on a menu choice from the menu.	The "explicit assist" command in Luciw is executed by selection of an on-screen button. *See, e.g.*, Fig. 2 at 24; 8:51-53. Other commands in Luciw are selected from a menu. *See, e.g.*, 3:14-20; 11:60-12:6 ("Responsive to the recognition of the name ISAAC, the assistance process has produced a list of alternatives by earlier query of the database per step 106 in FIG. 3. In particular, three ISAAC are presented for selection of one of them …").

It was common knowledge that commands can be selected via a button or via a pop-up menu (which are both disclosed in Luciw). (Menascé Decl. ¶ 90.) Thus, it would have been obvious to a person of ordinary skill in the art that selection of the "explicit assist" command could be made from a conventional

menu, as a matter of user interface design. Providing such functionality would have been a predictable modification of Luciw well within ordinary skill. (*Id.*)

15. A method according to claim 1, further comprising, if searching results in a plurality of distinct instances of second information, displaying such instances to enable user selection of one of them for use in performing the action.	If the search returns a plurality of distinct results, the results are displayed to enable the user to select one, as shown by the three "Isaacs" in Fig. 6b. *See, e.g.*, 11:60-12:6 ("Responsive to the recognition of the name ISAAC, the assistance process has produced a list of alternatives by earlier query of the database per step 106 in FIG. 3. In particular, three ISAAC are presented for selection of one of them …").

16. A method according to claim 1, wherein the information source is associated with the second computer program and is available on the computer.	Luciw searches a database (information source) available on the computer using a database search program, such as a contact database. *See* claims 1f and 1h.

17. A method according to claim 1, wherein the information source is associated with the second computer program and is available through the computer.	*See* claim 16.

18. A method according to claim 1, wherein performing the action includes causing insertion of at least part of the second information into the document.	*See* claim 5.

19. A method according to claim 1, wherein performing the action includes causing insertion of at least part of the second information into the document by the first computer program.	*See* claim 5.

[20a] 20. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	*See* claim 1a.
[20b] displaying the document electronically using the first computer	*See* claim 1b.

program;	
[20c] while the document is being displayed, analyzing, in a computer process on the computer, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information, and	*See* claim 1c.
[20d] wherein the first information comprises at least one of name-, person-, company-, and address-related information;	*See* claim 2.
[20e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	*See* claim 1e.
[20f] the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the search term in a user editable information source outside the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	*See* claim 1f. In claim 15 the user selects a person from suggestions provided. However, the system in Luciw can automatically make a selection for the user by selecting the last used selection, most frequently used, etc. To do so, it maintains a database of persons and usage information, then updates the database upon user selection. *See, e.g.*, Figs. 7a-7c, 12:7-40, 17:7-9 ("A computer system as recited in claim 5 further including means for updating the database to contain information regarding the selected alternative."). When a user enters a person for the first time, the person must necessarily be added to the database. Thus, the database is user editable.
[20g] (ii) performing an action using at least part of the second information,	*See* claim 1g.

[20h] wherein the input device includes a menu;	*See* claim 14.
[20i] retrieving the first information;	*See* claim 1d.
[20j] in consequence of receipt by the first computer program of the user command, such user command including a user's selection of the menu and click on a menu choice from the menu,	*See* claim 14.
[20k] causing a search for the search term in the user editable information source, using a second computer program, in order to find second information related to the search term in the user editable information source; and	*See* claim 1h.
[20l] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1i.
[20m] wherein the action is of a type depending at least in part on the type or types of the first information and	*See* claim 1j.
[20n] performing the action includes at least causing display of at least part of the second information.	*See* claim 6.

21. A method according to claim 20, further comprising, if searching results in a plurality of occurrences of second information, causing display of such instances to enable user selection of one of them for use in performing the action.	*See* claim 15.

22. A method according to claim 20, wherein performing the action includes causing addition of at least part of the second information to the first information in the document.	*See* claim 5.

C. Computer Readable Medium Claims

Computer readable medium claims 23-29 and 32-44 would have been obvious in view of Luciw. These claims correspond to method claims 1-7 and 10-

22. Luciw discloses or renders obvious the steps in the body of the computer readable medium claims (as set forth above with respect to the corresponding method claims) and further discloses a computer readable medium including program instructions (*see, e.g.*, Fig. 1 at 22).

IX. GROUND 4: OBVIOUSNESS OF CLAIMS 1, 2, 8, 14-17, 20, 21, 23, 24, 30, 36-39, 42, AND 43 IN VIEW OF PANDIT

Pandit was filed on December 27, 1995 and thus qualifies as prior art under § 102(e) based on the earliest alleged U.S. filing date of the '843 patent. As set forth in the title, Pandit is directed to recognition of and operation on text data. For example, a document is illustrated in Figs. 1a-1f. Various text items in the document can be selected by the user and analyzed to determine the nature of the text, *e.g.*, whether it is a date, an e-mail address or a phone number. Based upon this determination, various actions relating to the determined type of text can be made available for selection by the user. For example, as shown in Fig. 1f below, determination that a selected text item is a phone number can result in provision of available actions including calling the number, adding the number to an address book or sending a fax to the number.

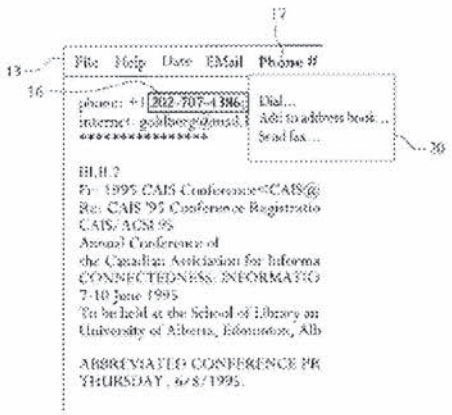


FIG. 1f

A. Method Claims

Set forth below is a claim chart that specifies where each element of method claims 1, 2, 8, 14-17, 20, and 21 are met by Pandit. Any narrative discussion with respect to obviousness for a given claim or claim element is provided directly under that claim or claim element with double line spacing.

Claim	Pandit
[1a] 1. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	Pandit discloses a computer-implemented method for finding data related to identified text. *See, e.g.*, 5:25-43; Abstract ("Text of a predetermined class is recognized in a body of text. After recognition, operations relevant to the recognized text may be performed."); 3:1-15.
[1b] displaying the document electronically using the first computer program;	The document is displayed using a first computer program. *See, e.g.*, 5:18-21 ("Any text appearing on a video monitor can be operated on by the invention, whether the text is within an EMail message, World-Wide Web site, created by a word processing or database program, etc.").
[1c] while the document is being displayed, analyzing, in	While the document is being displayed, the text is analyzed in a computer process to determine if

a computer process, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information;	the text is of a type that can be searched to find related information. *See, e.g.*, 2:8-15, 25-32 ("…the invention is not limited to the recognition of dates in text and preferred embodiments of the invention can recognize e-mail addresses and telephone numbers…")
[1d] retrieving the first information;	The text is retrieved and identified. *See* claim 1c.
[1e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	Pandit discloses providing a menu (input device) that allows a user to select an operation to be performed. *See, e.g.*, FIGS. 1b, 1d, and 1f; 2:8-23 ("A view of an embodiment of a pulled-down Date menu 18 is shown in FIG. 1b. A user may directly call a calendar or appointment database program from pulled-down menu 18. Other programs may be included in pulled-down date menu 18 as discussed below."). *See* narrative below.

To the extent that Pandit does not explicitly disclose that the menu is "configured by" the first application program, it would have been obvious to a person of ordinary skill in the art that the menu would be configured by the first application program in order to be displayed with the first application program. (Menascé Decl. ¶ 98.) This would have been a predictable modification of Pandit that was well within ordinary skill, because configuring a menu was a well-known function of word processing programs. (*Id.*)

[1f] the operation comprising	If the identified text is of a certain type, the user

(i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the search term in an information source external to the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	can use the text to search an external information source to find information associated with the text. For example, searching a dictionary for the meaning of an identified word. *See, e.g.*, 3:11-15 ("Where the invention is capable of recognizing nouns or verbs, pull-down menus can, for example, identify executable programs which provide the meaning of the highlighted word, appropriate synonyms and the singular or plural version of the noun or conjugation of the verb."). Further, Pandit discloses adding an identified number to an address book. *See, e.g.*, Figs. 1d and 1f; 2:56-53; 3:1-10 ("As shown in FIG. 1f on pulled-down menu 20, possible programs include a writable computer database of telephone and telefax numbers …"). *See* narrative below. The type of second information depends on the type of first information. For example, if the first information is a phone number, the second information is contact information associated with the phone number.

It would have been obvious to a person of ordinary skill in the art that the first step in adding to an address book is searching the address book to determine if an entry already exists with this information and displaying any associated information which is located. (Menascé Decl. ¶ 99.) This would have been a matter of common sense to one of ordinary skill, in order to avoid multiple entries of the same address. (*Id.*)

[1g] (ii) performing an action using at least part of the second information;	The meaning of the identified word and the contact information associated with the identified number are displayed for the user (an action using

	second information). *See* claim 1f.
[1h] in consequence of receipt by the first computer program of the user command from the input device, causing a search for the search term in the information source, using a second computer program, in order to find second information related to the search term; and	When the user selects an action from the menu of available operations, the system uses a second computer program (*e.g.*, dictionary program or address book program) to search the information source using the identified text. *See* claim 1f.
[1i] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1g.
[1j] wherein the action is of a type depending at least in part on the type or types of the first information.	The action performed depends on the type of information identified in the document. For example, defining an identified word versus looking up associated contact information for an identified number. *See* claims 1f-1g.

2. A method according to claim 1, wherein the first information comprises at least one of name-, person-, company- and address-related information.	The system in Pandit can identify name and address related information. *See, e.g.*, 2:28-32 ("[T]here is no limit on the type of text which can be recognized by the invention and additional embodiments can recognize such classes of text as … names, street addresses, etc."); 4:29-31.

8. A method according to claim 1, further comprising, providing a prompt for updating the information source to include the first information.	The system prompts the user to select an action to perform by displaying a pop-up menu of actions, as discussed in claim 1e. Several of these actions update an information source to include first information. *See, e.g.*, Figs. 1d and 1f ("Add to address book"); 3:1-3 ("As shown in FIG. 1f on pulled-down menu 20, possible programs include a writable computer database of telephone and telefax numbers …"); 2:46-49.

14. A method according to claim 1, wherein the input device is a menu and the entry of the user command includes a user's selection of the menu and click on a menu choice from the menu.	The user selects a command from a menu by clicking a menu choice. *See, e.g.*, 2:41-45 ("A user is able to run one or more of the programs relevant to dates which are identified in the pulled-down menu in a known manner, such as by clicking on the name of the program as it appears in the pulled-down menu …").

15. A method according to claim 1, further comprising, if searching results in a plurality of distinct instances of second information, displaying such instances to enable user selection of one of them for use in performing the action.	*See* narrative below.

Pandit discloses recognizing names in a document (2:25-32) and performing actions using an address book (Figs. 1d and 1f; 2:56-61; 3:1-3). In view of this, it would have been obvious to a person of ordinary skill in the art to enable a user to call a person with the identified name by searching the address book, and, if the person had multiple numbers in the address book, to display them for selection. (Menascé Decl. ¶ 100.) This would have been simply a matter of common sense and common knowledge and there would have been design and market incentives to provide such functionality. (*Id.*) One of ordinary skill would have been able to apply a known technique (displaying for selection plural results of a search) to the known method of Pandit to yield a predictable result. (*Id.*)

16. A method according to claim 1, wherein the information source is	The dictionary and address book (information source) are associated with

associated with the second computer program and is available on the computer.	the dictionary and address book applications and are available on and through the computer.

17. A method according to claim 1, wherein the information source is associated with the second computer program and is available through the computer.	*See* claim 16.

[20a] 20. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:	*See* claim 1a.
[20b] displaying the document electronically using the first computer program;	*See* claim 1b.
[20c] while the document is being displayed, analyzing, in a computer process on the computer, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information, and	*See* claim 1c.
[20d] wherein the first information comprises at least one of name-, person-, company-, and address-related information;	*See* claim 2.
[20e] providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation,	*See* claim 1e.
[20f] the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the search term in a user editable information source outside the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and	*See* claim 1f. The user can add information to the address book, thus it is user editable. *See* claim 8.
[20g] (ii) performing an action using at least part of the second information,	*See* claim 1g.
[20h] wherein the input device includes a menu;	*See* claim 14.
[20i] retrieving the first information;	*See* claim 1d.
[20j] in consequence of receipt by the first computer program of the user command, such user command including a user's selection of the menu and click on a menu choice from the	*See* claim 14.

menu,	
[20k] causing a search for the search term in the user editable information source, using a second computer program, in order to find second information related to the search term in the user editable information source; and	*See* claim 1h.
[20l] if searching finds any second information related to the search term, performing the action using at least part of the second information,	*See* claim 1i.
[20m] wherein the action is of a type depending at least in part on the type or types of the first information and	*See* claim 1j.
[20n] performing the action includes at least causing display of at least part of the second information.	*See* claim 15.

21. A method according to claim 20, further comprising, if searching results in a plurality of occurrences of second information, causing display of such instances to enable user selection of one of them for use in performing the action.	*See* claim 15.

B. Computer Readable Medium Claims

Computer readable medium claims 23, 24, 30, 36-39, 42, and 43 would have been obvious in view of Pandit. These claims correspond to method claims 1, 2, 8, 14-17, 20, and 21. Pandit discloses or renders obvious the steps in the body of the computer readable medium claims (as set forth above with respect to the corresponding method claims) and further discloses a computer readable medium including program instructions (*see, e.g.*, 5:25-46).

X. CONCLUSION

For the reasons detailed above, there is a reasonable likelihood that Petitioner will prevail as to each of claims 1-44 of the '843 patent. Accordingly, *inter partes* review of claims 1-44 of the '843 patent is respectfully requested. The

USPTO is authorized to charge any required fees, including the fee as set forth in 37 C.F.R. § 42.15(a) and any excess claim fees, to Deposit Account No. **03-1952** referencing Docket No. **106842805100**.

Dated: December 2, 2013

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Certificate of Service (37 C.F.R. § 42.6(e)(4))

I hereby certify that the attached Petition for *Inter Partes* Review and supporting materials were served as of the below date by FedEx, which is a means at least as fast and reliable as U.S. Express Mail, on the Patent Owner at the correspondence address indicated for U.S. Patent No. 7,917,843 (*i.e.*, Sunstein Kann Murphy & Timbers LLP, 125 Summer Street, Boston, MA 02110-1618).

Dated: December 2, 2013

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EXHIBIT B

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Paper No. 8
Date Entered: June 11, 2014

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., GOOGLE INC., and MOTOROLA MOBILITY LLC
Petitioner

v.

ARENDI S.A.R.L.
Patent Owner

Case IPR2014-00208
Patent 7,917,843 B2

Before HOWARD B. BLANKENSHIP, SALLY C. MEDLEY, and TREVOR M. JEFFERSON, *Administrative Patent Judges.*

BLANKENSHIP, *Administrative Patent Judge.*

DECISION
Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. BACKGROUND

Apple Inc., Google Inc., and Motorola Mobility LLC (collectively "Petitioner") requests *inter partes* review of claims 1-44 of U.S. Patent No.

7,917,843 B2 ("the '843 patent") (Ex. 1001) under 35 U.S.C. §§ 311-319. Paper 1 ("Pet."). Arendi S.A.R.L. ("Patent Owner") submitted a preliminary response under 37 C.F.R. § 42.107(b) on March 12, 2014. Paper 6 ("Prelim. Resp."). We have jurisdiction under 35 U.S.C. § 314.

For the reasons that follow, we institute an *inter partes* review of claims 1, 2, 8, 14-17, 20, 21, 23, 24, 30, 36-39, 42, and 43 of the '843 patent. We do not institute review of challenged claims 3-7, 9-13, 18, 19, 22, 25-29, 31-35, 40, 41, and 44.

The Challenged Patent

The '843 patent relates to a computer program that receives information typed by a user into a document (as in a word processor) and searches an external source, such as a database, to determine if the typed information exists in the database. The computer program may add a user-selectable button to the word processor that causes execution of another program to receive the typed information and to search the database. Ex. 1001, col. 3, ll. 35-54. Consequently, the user does not have to learn how to use and have access to the database. *Id.* at col. 1, ll. 43-49.

Figure 3 of the '843 patent is reproduced below.

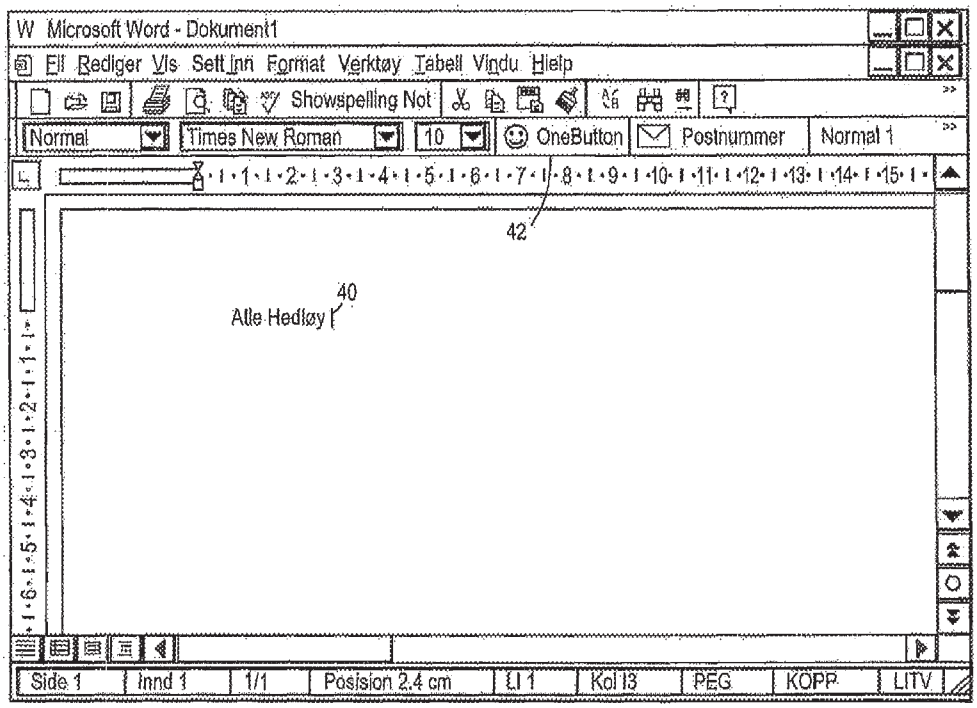

FIG. 3

Figure 3 is said to be a screen shot that illustrates the inputting of a name to be searched and an address handling button within a word processor. *Id.* at col. 2, ll. 51-54. The user has typed the name of an existing contact 40. The user selects button 42, marked "OneButton." In response, the program of the invention retrieves existing contact 40 from the document and searches a database for the name of the existing contact. *Id.* at col. 7, ll. 30-37.

Figure 4 of the '843 patent is reproduced below.

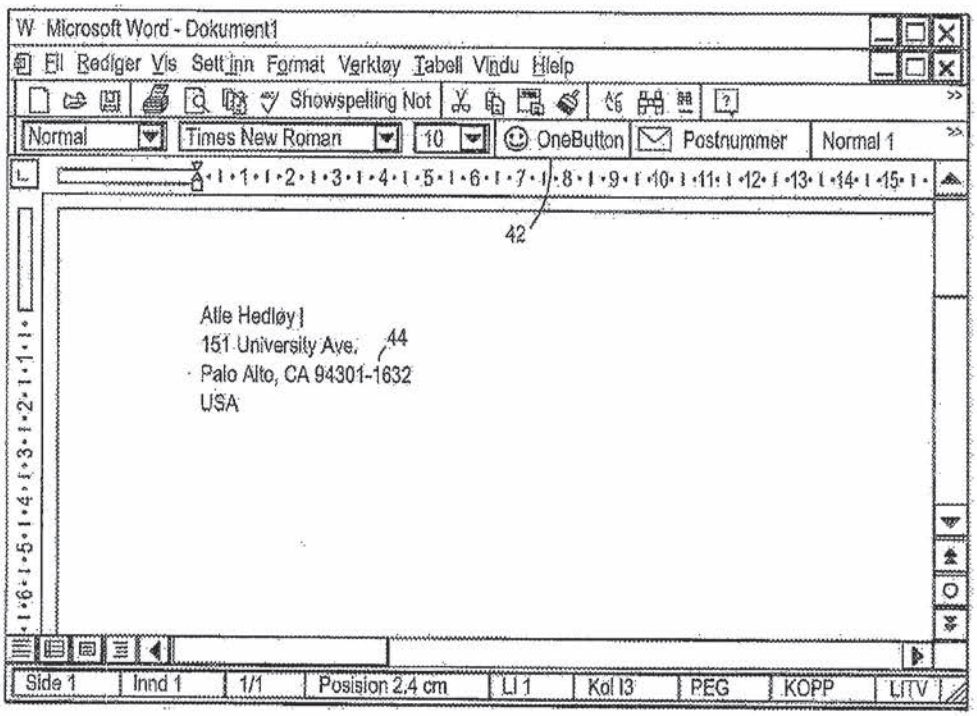

FIG. 4

Figure 4 is said to be a screen shot illustrating a retrieved address in a word processor. *Id.* at col. 2, ll. 55-57. The user has typed a name and new address of existing contact 44. The user selects "OneButton" 42 and the program of the invention retrieves existing contact 44 from the document and searches a database for the name of the existing contact. *Id.* at col. 8, ll. 13-19.

Illustrative Claim

1. A computer-implemented method for finding data related to the contents of a document using a first computer program running on a computer, the method comprising:

displaying the document electronically using the first computer program;

while the document is being displayed, analyzing, in a computer process, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information;

retrieving the first information;

providing an input device, configured by the first computer program, that allows a user to enter a user command to initiate an operation, the operation comprising (i) performing a search using at least part of the first information as a search term in order to find the second information, of a specific type or types, associated with the search term in an information source external to the document, wherein the specific type or types of second information is dependent at least in part on the type or types of the first information, and (ii) performing an action using at least part of the second information;

in consequence of receipt by the first computer program of the user command from the input device, causing a search for the search term in the information source, using a second computer program, in order to find second information related to the search term; and

if searching finds any second information related to the search term, performing the action using at least part of the second information, wherein the action is of a type depending at least in part on the type or types of the first information.

Related Proceedings

According to the parties, the '843 patent is involved in the following lawsuits: *Arendi S.A.R.L. v. Apple Inc.*, No. 1:12-cv-01596-LPS (D. Del.); and *Arendi S.A.R.L. v. Motorola Mobility LLC*, No. 1:12-cv-01601-LPS (D. Del.); *Arendi S.A.R.L. v. Yahoo! Inc.*, No. 1:13-cv-00920 (D. Del.); *Arendi S.A.R.L. v. Google Inc.*, No. 1:13-cv-00919 (D. Del.); *Arendi S.A.R.L. v. HTC Corp., et al.*, No. 1:12-cv-01600 (D. Del.); A*rendi S.A.R.L. v. Sony Mobile Communications (USA) Inc.*, No. 1: 12-cv-01602 (D. Del.); *Arendi S.A.R.L. v. Nokia Corporation, et al.*, No. 1:12-2cv-01599 (D. Del.); *Arendi S.A.R.L. v. Blackberry Limited, et al.*, No. 1:12-cv-01597 (D. Del.); *Arendi S.A.R.L. v. LG Electronics Inc., et al.*, No. 1:12-cv-015959 (D. Del.); and *Arendi S.A.R.L. v. Samsung Electronics Co. Ltd., et al.*, No. 1:12--cv01598 (D. Del.). According to Patent Owner, patents related to the '843 patent are involved in the following *inter partes* reviews: IPR2014-00206, IPR2014-00207, IPR2014-00203, and IPR2014-00214.

Prior Art

Miller	US 5,946,647	Aug. 31, 1999	Ex. 1007
Luciw	US 5,644,735	Jul. 1, 1997	Ex. 1008
Pandit	US 5,859,636	Jan. 12, 1999	Ex. 1009

Miller et al., From Documents to Objects, An Overview of LiveDoc, 30(2) SIGCHI (April 1998) (Ex. 1010) ("LiveDoc").

Bonura et al., Drop Zones, An Extension to LiveDoc, 30(2) SIGCHI (April 1998) (Ex. 1010) ("Drop Zones").

Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability under 35 U.S.C. § 103(a) (Pet. 8):

Reference(s)	Claims
LiveDoc and Drop Zones	1-44
Miller	1-44
Luciw	1-7, 10-29, and 32-44
Pandit	1, 2, 8, 14-17, 20, 21, 23, 24, 30, 36-39, 42, and 43

II. ANALYSIS

Claim Interpretation

Consistent with the statute and the legislative history of the Leahy-Smith America Invents Act (AIA), the Board will construe the claims of an unexpired patent using the broadest reasonable interpretation. 37 C.F.R. § 42.100(b); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012). The claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The Office must apply the broadest reasonable meaning to the claim language, taking into account any definitions presented in the specification. *Id.* (citing *In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002)). There is a "heavy presumption" that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). The "ordinary and customary meaning" is that which the term would have to

a person of ordinary skill in the art in question. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Providing An Input Device, Configured by the First Computer Program

Each of the independent claims (1, 20, 23, and 42) contains the phrase "providing an input device, configured by the first computer program." The '843 patent indicates that an "input device" can be a touch screen button, a keyboard button, an icon, a menu choice, or a voice command device, suitable for calling an external program from a word processor. *See* Ex. 1001, col. 3, ll. 35-54. Petitioner submits that the '843 patent specification "gives no guidance" regarding how the input device is "configured by" the first computer program. Pet. 7. Indeed, it appears that no form of the word "configure" is used in the patent's description of the input device as it relates to a computer program. On the evidence before us, it appears that the phrase in question was added to the claims during prosecution, with no discussion as to how the input device may be "configured by" the first computer program, nor any indication as to how the phrase might be deemed to distinguish over the prior art. *See* Ex. 1003 at 9-19.

Patent Owner provides a general dictionary definition to indicate that "configure" means "to design, arrange, set up, or shape with a view to specific applications or uses." Prelim. Resp. 7 citing Ex. 2001 at 1. Based on this definition, Patent Owner submits that "providing an input device, configured by the first computer program" should be construed as "an input device, set up by the first computer program for use." Prelim. Resp. 7. Patent Owner also contends that the claims require "providing" the input

device, in addition to the device being "configured by" the computer program (*id.* at 7-8), but does not offer any interpretation for what "providing" of the input device might require.

Although claims 23 and 42 are drawn to "[a]t least one non-transitory computer readable medium," the "providing" of an input device is in the form of a method step in all the independent claims. The phrase in question does not specify that the first computer program "provides" an input device. We interpret "providing" an input device merely as requiring the presence of the device; that is, the input device is a structure that exists in steps that "allow[] a user to enter a user command to initiate an operation," as claimed.

For purposes of this decision, we adopt Patent Owner's construction that "an input device, configured by the first computer program" means that the input device is set up by the first computer program for use. We agree with Petitioner (Pet. 7) to the extent that the "input device" is an interface to receive a user command, such as a user-selectable area or icon on a computer screen.

Proposed Grounds of Unpatentability

LiveDoc and Drop Zones

Petitioner submits that LiveDoc and Drop Zones teach a computer-implemented method for finding data related to the contents of a document that includes displaying the document electronically using a first computer program. Pet. 12 (claim chart). The document shown in Figure 2 of Drop Zones (Ex. 1006 at 7)[1] is displayed by using a text entry application

[1] Although the Petition cites to page numbers in the LiveDoc and Drop Zones references, we cite to corresponding pages in Exhibit 1006.

program, *LiveSimpleText*, which the Petition maps to the claimed "first computer program." Pet. 12. For the limitation of "providing an input device, configured by the first computer program," Petitioner acknowledges that the "input device" in the reference (the highlighted area shown in Figure 2 of LiveDoc) is not configured by the text entry application program. The reference, instead, teaches that LiveDoc "knows" where the structures appear in the text passed to it, but LiveDoc "has no idea" where in the window those characters physically appear. That information is held by the application, not by LiveDoc. Hence, LiveDoc must ask the application for the information about the structures it has found "via a callback" to the application. Pet. 13-14; Ex. 1006 at 8. To make up for the admitted deficiency of the references, Petitioner alleges that "it would have been obvious for LiveDoc to contact the word processor via callback and inform it of the position of the detected structures within text, such that the word processor would then construct the highlights (input device) by mapping positions in text to positions in the visible window." Pet. 14. Petitioner refers, for support, to the Declaration of Dr. Daniel A. Menascé.

Dr. Menascé testifies that the "approach" that is not described in LiveDoc would be "equivalent" and "would yield the same predictable result" to that described by the reference, apparently because it "would have been a predictable modification of LiveDoc that was well within ordinary skill, in order to perform a known function of standard word processing programs." Ex. 1002 ¶ 61. Neither Petitioner nor Declarant, however, points to anything in the record to demonstrate existence of the asserted "known function of standard word processing programs" at the time of invention of the claimed subject matter of the '843 patent. Expert testimony

that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight. 37 C.F.R. § 42.65(a).

We are persuaded by Patent Owner that Petitioner's allegation that it would have been obvious to change the functionality of LiveDoc and the associated text entry application program in a way that is consistent with the claimed invention is, in effect, mere hindsight-driven argument. Prelim. Resp. 27 n.1.

> Although the obviousness analysis should "take account of the inferences and creative steps that a person of ordinary skill in the art would employ," the Supreme Court emphasized that this evidentiary flexibility does not relax the requirement that, "[t]o facilitate review, this analysis should be made explicit." *Id.* [*KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007)], 127 S.Ct. 1727 (citing [*In re*] *Kahn*, 441 F.3d [977,] 988 [(Fed. Cir. 2006)]) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.")).

Perfect Web Tech., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1330 (Fed. Cir. 2009). In short, Petitioner's allegations fail to "specify where each element of the claim is found . . . ." 37 C.F.R. § 42.104(b)(4).

Each of the independent claims (1, 20, 23, and 42) contains substantially similar limitations that are material to the deficiency with respect to what the "first computer program" requires. In view of the foregoing, we conclude that Petitioner has not demonstrated a reasonable likelihood that it would prevail with respect to any of claims 1-44 in a § 103(a) challenge over LiveDoc and Drop Zones.

Miller

Petitioner submits that the "first computer program" of claim 1 is taught by Miller's word processor (application 167) that is depicted in Figure 1 of the reference. Pet. 25-26. The "detect structures" button 520 (Miller Fig. 5) is an input device that allows the user to enter a command for initiating program 165. *Id.* at 26.

Figure 5 of Miller shows window 510 that presents an exemplary document. The window includes button 520 for initiating program 165. Ex. 1007, col. 5, ll. 19-24. Application (word processor) 167 presents data on the output device to a user. *Id.* at col. 3, ll. 34-67. Although window 510 includes button 520 for initiating program 165, Petitioner does not allege that button 510 is provided by the word processor. Petitioner submits, instead, that a modification must be made to the "first computer program" in Miller to include the "input device." "It would have been obvious for the word processor program 167 to provide an interface, such as button 520, to receive a user command." Pet. 26. Petitioner cites to, as support, the declaration of Dr. Menascé.

Dr. Menascé testifies that it was well known to configure word processing programs to add graphical user interface (GUI) elements, such as additional menu options or buttons, to provide desired functionality. Ex. 1002 ¶ 71. Dr. Menascé refers to a paper and a book, each co-authored by Declarant, which are asserted to discuss tools relating to "Visual Basic code" for customized GUI elements. *Id.* Declarant does not, however, provide a copy of relevant sections of the paper and book as exhibits, nor indicate or explain how the disclosures (not provided) might have led one of ordinary

skill in the art to modify Miller consistent with the requirements of claim 1, to support the allegation of what "would have been obvious." We find Petitioner's evidentiary basis for the allegation to be lacking.

Each of the other independent claims (20, 23, and 42) contains substantially similar limitations that are material to the deficiency with respect to what the "first computer program" requires. In view of the foregoing, we conclude that Petitioner has not demonstrated a reasonable likelihood that it would prevail with respect to any of claims 1-44 in a § 103(a) challenge over Miller.

Luciw

Claim 1 of the '843 patent recites "while the document is being displayed, analyzing, in a computer process, first information from the document to determine if the first information is at least one of a plurality of types of information that can be searched for in order to find second information related to the first information." For this limitation, Petitioner points to description in Luciw of entering information into a smart field. Pet. 37. Petitioner also refers to an "implicit assist" as taught by Luciw. *Id.* at 38.

Luciw describes entering information into a smart field (e.g., Fig. 4b; "Name" field 175 in window 170). Ex. 1008, col. 8, ll. 15-18. The reference also describes an "implicit assist" action that may be triggered by writing in the notepad outside of a smart field. *Id.* at col. 8, ll. 30-41.

As Patent Owner argues, however, by the act of using a smart field, the user informs the computing device what type of information the user is entering. No analysis to identify the type of information is performed or

needed. Prelim. Resp. 50. For example, as shown in Luciw's Figure 4b, information may be entered into "Name" field 175 or "Phone" field 177, thus identifying the type of information.

Further, as noted by Patent Owner (Prelim. Resp. 51-53), Petitioner has not shown that analyzing entered text is part of Luciw's "implicit assist" operation. Petitioner submits that "the device in Luciw analyzes a user's entry (first information from the document) to determine if implicit assistance is possible and the kind of implicit assist indicated (determine whether first information can be used to find second information)." Pet. 38 (referring to Ex. 1008, col. 10, ll. 15-20 and col. 8, ll. 7-13; Figs. 3 and 4a). However, determining if implicit assist is possible, and "the kind" of implicit assist indicated, has not been shown to be an analysis of the information to determine if it is a type of information that can be searched for in order to find second information related to the first information, in accordance with the requirements of the claim. As Patent Owner points out, Luciw does not teach analyzing the information to determine information type in the implicit assist operation. As shown in Luciw's Figure 3, "Implicit Assist" (step 104) if enacted, results in "Query Database" (step 106), with no intervening step of determining the type of information. Ex. 1008, Fig. 3.

Each of the other independent claims (20, 23, and 42) contains substantially similar limitations that are material to the deficiency with respect to what the "analyzing" requires. In view of the foregoing, we conclude that Petitioner has not demonstrated a reasonable likelihood that it would prevail with respect to any of claims 1-7, 10-29, and 32-44 in a § 103(a) challenge over Luciw.

Pandit

Each of the independent claims of the '843 patent recites "performing a search . . . wherein the specific type or types of second information [found] is dependent at least in part on the type or types of the first information [used as a search term]." Prelim. Resp. 53. Petitioner submits (Pet. 50-51) that Pandit discloses performing a search in an information source external to the document, which is a further requirement of the claim. Petitioner does not seem to allege that the disclosed dictionary search relates to the first and second types of information dependency in the claim. Petitioner submits, however, that Pandit discloses adding an identified number to an address book. Pet. 51; Ex. 1009, col. 2, l. 56 - col. 3, l. 10; Figs. 1d and 1f.

Figure 1f of Pandit is reproduced below.

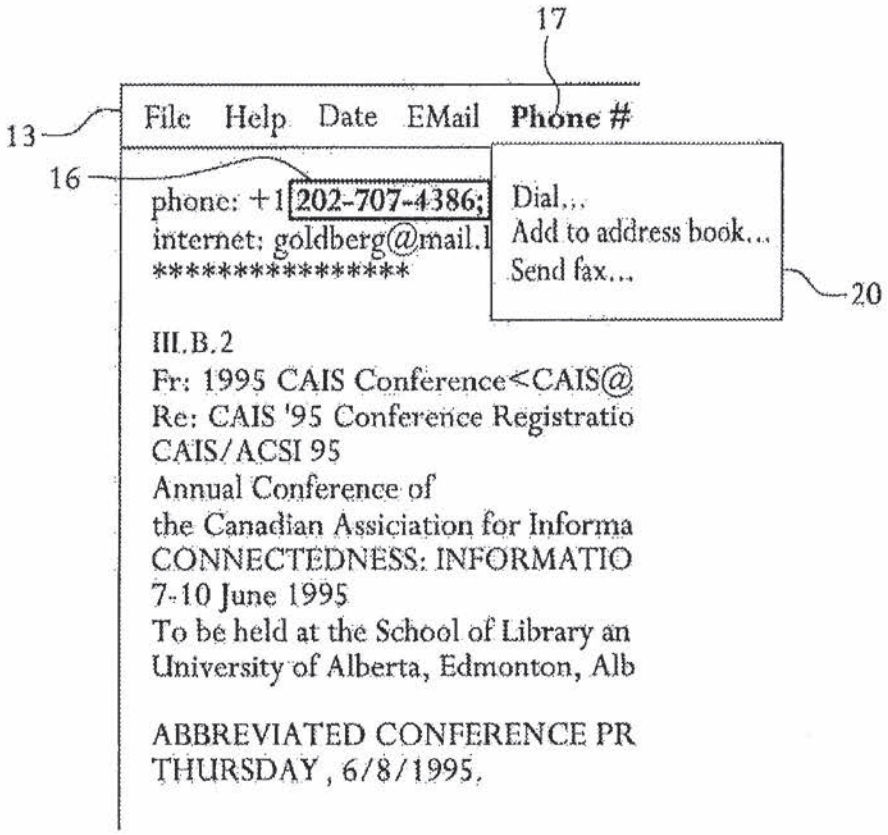

FIG. 1f

Figure 1f is said to show a graphical representation of text on a video monitor. Ex. 1009, col. 1, ll. 59-60. The Figure shows that text (telephone number 16) has been selected by the user and highlighted. Pull down menu 17 ("Phone #") in menu bar 13 has been selected, yielding pulled-down menu 20. Links in pulled-down menu 20 allow the user to, for example, select the link "Add to address book. . ." in order to call a program to add the

selected text (telephone number 16) to the address book. *Id.* at col. 2, l. 1 – col. 3, l. 10.

In order to avoid multiple entries of the same address, Petitioner submits that it would have been obvious that the first step in adding to an address book is to search the address book to determine if an entry already exists with the entered information, and displaying any associated information that is located. Pet. 51. Petitioner refers to the declaration of Dr. Menascé. *Id.* Dr. Menascé concurs. Ex. 1002 ¶ 99.

Patent Owner argues that Petitioner's proposed search would fail to meet the requirements of the claim. The search for pre-existing entries would be a search for a duplicate telephone number. According to Patent Owner, a search for duplicate entries would be a search for "first information," not a search "in order to find the second information, of a specific type or types," as required by claim 1. Prelim. Resp. 58-59.

We find Patent Owner's argument to be unpersuasive. Pandit teaches that, from pulled down-menu 20 (Fig. 1f), programs that can be called may include a writeable computer database of telephone and telefax numbers. Ex. 1009, col. 3, ll. 1-3. Dynamically linked libraries may contain subroutines for implementing the invention with respect to telephone and telefax numbers. *Id.* at col. 4, ll. 20-31. It would be reasonable to presume, as a matter of common sense, that the subroutine would search for duplicate telephone numbers and, upon locating a duplicate entry, both the first information and associated (or second) information, such as the name and/or address associated with the telephone number, would be displayed to the user. A person having a bound paper address book would look first to determine if a potential new contact had been entered previously. A

computerized search for duplicate entries would be a search "in order to find the second information, of a specific type or types," as claimed, in the same sense that the '843 patent's search is in order to find the second information. As shown, for example, in Figure 1 of the '843 patent, a name (first information) can be searched for in a database (12), and more than one possible contact or address (containing second information) may be found to match with the first information (18). The first and the second information are displayed to the user for user action (20). Searching a database for a telephone number in Pandit's system, and displaying results, would be no different in substance from searching a database for a name, and displaying results, in the disclosed example in the '843 patent. "What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 419 (2007).

We have reviewed Petitioner's evidence regarding the dependent claims as well and, based on this record, are persuaded that Petitioner has shown a reasonable likelihood that it would prevail in the § 103(a) challenge of claims 1, 2, 8, 14-17, 20, 21, 23, 24, 30, 36-39, 42, and 43 of the '843 patent over Pandit.

III. CONCLUSION

The Petition demonstrates a reasonable likelihood of prevailing on the obviousness ground of unpatentability based on Pandit.

The Board has not made a final determination on the patentability of any challenged claim.

IV. ORDER

In consideration of the foregoing, it is

ORDERED that an *inter partes* review is instituted as to '843 patent claims 1, 2, 8, 14-17, 20, 21, 23, 24, 30, 36-39, 42, and 43 on the obviousness ground based on Pandit;

FURTHER ORDERED that the Petition is denied as to all other grounds set forth in the Petition;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of the '843 patent is instituted with trial commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is given of the institution of the trial; and

FURTHER ORDERED that the trial is limited to the grounds identified immediately above and no other ground is authorized for the '843 patent claims.

IPR2014-00208
Patent 7,917,843 B2

For Petitioner:

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EXHIBIT C

From: Unikel, Robert
To: Kalpana Srinivasan; Seth Ard; John Lahad; Max Straus; Laura Camp; Neal C. Belgam; Susan M. Betts; Daniel A. Taylor; Kemper Diehl; Richard Wojtczak
Cc: Bindu Palapura; David Moore; Ginger Anders; Ling, Vinny; Mann, Evan; Google-Arendi
Subject: Google Invalidity Positions
Date: Friday, April 7, 2023 4:50:26 PM
Attachments: image001.png

EXTERNAL Email

Arendi Team,

I am notifying you of invalidity positions that Google may present at trial. In accord with the pretrial conference discussion yesterday, these positions include invalidity for anticipation and/or invalidity for obviousness based on 8 combinations. If as the result of any meet-and-confer discussions or Court rulings, any of these obviousness combinations is withdrawn, Google reserves the right to substitute in another permitted obviousness combination from the list set forth in Paragraph 186 of the Expert Report of Edward Fox, Ph.D.

The positions that Google may present at trial are as follows (with the obviousness combinations presented in the order they appear in Paragraph 186 of the Fox report):

Anticipation based on the CyberDesk System

Obviousness based on the following combinations:

1. Pandit + CyberDesk System
2. Pandit + Apple Data Detectors System
3. Pandit + Newton System
4. CyberDesk System + Chalas
5. CyberDesk System + Apple Data Detectors System
6. CyberDesk System + Newton System
7. CyberDesk System + Microsoft Word 97 System
8. Apple Data Detectors System + Microsoft Word 97 System

To address any concern you might have had about IPR estoppel, each of the listed eight combinations includes at least one prior art product/system, such that IPR estoppel cannot apply. *See Chemours Co. FC, LLC v. Daikin Indus., Ltd.*, July 8, 2022 Memorandum Order, pp. 1-2 (D. Del., J. Noreika) ("As a matter of statutory interpretation, estoppel does not apply to the prior-art products that Daikin relies on – regardless of whether those products are 'cumulative.' . . . [A]ny invalidity theory relying upon that product as a prior art reference is not a 'ground' that reasonably could have been raised during the IPR."). Moreover, each of these eight combinations is plainly permitted by Judge Stark's March 31, 2022 denial of Arendi's summary judgment motions based on IPR estoppel and alleged none-existence of prior art systems. *See* March 31, 20222 Order, pp. 10 ("The Court agrees with Motorola and Google that they are ***not*** barred from presenting combinations that consist of Pandit with ***non-estopped*** prior art references and systems (i.e., prior art that was not and could not have been presented during the IPR."); 14-15 (denying Arendi's IPR estoppel summary judgement motion as to the CyberDesk System); 15 (denying Arendi's IPR estoppel summary judgment motion as to the Newton System); 16-17 (denying Arendi's IPE estoppel summary judgment motion as to the Microsoft Word 97 System); 18 ("Arendi does not challenge the purported Apple Data Detectors and LiveDoc systems based on IPR estoppel."); 19 ("grounds consisting of combinations of . . . Chalas with other non-estopped prior art references and systems are not barred); 19-21 (denying Arendi's motion for summary judgment that the Apple Data Detectors System did not exist as a prior art system); and 23 (denying Arendi's motions to preclude use of the two Powerbook laptops produced by Apple to demonstrate the operation of the Apple Data Detectors System before the priority date of the '843 Patent).

As discussed with the Court, you and Arendi should promptly notify us if you contend that any of these invalidity positions are somehow improper so that we can meet-and-confer on your objections and address any issues to the Court, if necessary, sufficiently in advance of the trial.

Sincerely,
Rob Unikel

PAUL HASTINGS

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EXHIBIT C

From: Unikel, Robert
To: Kalpana Srinivasan; Seth Ard; John Lahad; Max Straus; Laura Camp; Neal C. Belgam; Susan M. Betts; Daniel A. Taylor; Kemper Diehl; Richard Wojtczak
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Sincerely,
Rob Unikel

PAUL HASTINGS

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EXHIBIT D

Expert Report of Edward Fox, Ph.D. On the Invalidity of U.S. Patent No. 7,917,843

Arendi S.A.R.L. v. Google LLC, Case No. 13-0919-LPS (D. Del.)
Arendi S.A.R.L. v. Motorola Mobility LLC, Case No. 12-1601-LPS (D. Del.)

the document editing program," because "it is ADD, a part of the operating system, that provides the input device"; iii.) "performing an action that 'depends at least in part on whether the search term is included in the information source,'" because "ADD carries through with an action irrespective of whether a search term is found in an information source"; and iv.) "causing insertion of at least part of the second information into the document," because "although Nardi does disclose generating word processor letterhead, the letterhead is not created in a document in which textual information is selected, as required by the claims." (pp. 113-14, AHL0164808-09). Again, however, in none of its patent applications did Arendi describe to the Patent Office the full range of publications and materials describing different aspects and features of the ADD System, and the Patent Office was not aware of the various public demonstrations and presentations of the ADD System offered by Apple in 1996 and 1997.

140. Further aspects of the ADD System are described in U.S. Patent No. 5,946,647 ("Miller"), which was filed on February 1, 1996, and issued on August 31, 1999. (ARENDI-DEFS00010281-96.) As described in Arendi's Petition for Accelerated Examination of Appl. No. 11/745,186, U.S. Patent No. 5,940,647 ("Miller") "discloses a method for detecting data in a document and performing a particular action based on the detected data (Abstract). For example, if a particular structure, such as a telephone number, is identified within the document, the telephone number within the document is mouse-sensitive (5:34-37). When a 'mouse-down' operation is recognized over the telephone number, a pop-up menu appears that enables the user to either dial the number or put the electronic number in a telephone book (Figs. 6 and 7; 5:38-50)." (Accl. Exam. of Appl. No. 11/745,186, p. 47, AHL0121116.)

141. The Accelerated Examination Support Document filed in support of the application for the '356 patent maps the Miller patent to claim elements that are substantially

similar to those included in the asserted '843 patent claims. (Doc. In Support of Pet. Accl. Exam. Appl. No. 12/841,302, pp. 27-33.) In this same Support Document, Applicant describes the Miller patent's disclosure and admits that the described ADD did not include certain claim elements. (*Id.* at pp. 103-104.) To reiterate, however, by itself, the Miller patent (like the ADD User Manual and the Nardi Publication) does not fully describe, illustrate, or suggest the full feature-set and operation of the ADD System as it was publicly demonstrated and/or used in 1996-1998.

142. For detailed, element-by-element analyses of how (1) the ADD System, and the materials describing aspects of that system, (2) Nardi, and (3) Miller disclosed and suggested the various elements of the asserted claims of the asserted patent, *see* Exs. E, F, and G.

C. LiveDoc System

143. LiveDoc Version 0.8 ("LiveDoc System") incorporates Data Detectors technology (described above) and was invented in the United States by Apple employees at least by December 5, 1995. (*See* External Requirements Specification for LiveDoc for Applications, Version 1.0a3, June 12, 1995, MILLER-APL00000025-57; "Structure Detectors/LiveDoc for Maxwell: A Starting Point, December 6, 1995," MILLER-APL00000091-95) Various aspects of the LiveDoc System are described in U.S. Patent No. 5,946,647 ("Miller"), which was filed on February 1, 1996, and in the articles "From Documents to Object: An Overview of LiveDoc" and "Drop Zones: An Extension of LiveDoc," both of which were published in the April 1998 issue of SIGCHI Bulletin. LiveDoc was demonstrated live at MacWord on or around August 7, 1996. The LiveDoc System could work in conjunction with Claris Emailer, Now Contact, and other applications.

144. While the various materials identified below describe certain features and certain aspects of the operation of the LiveDoc System, no single publication accurately captures or

phrase, "make a call to Bob at work," the Intelligent Assistant would extract the words "call," "Bob" and "work," in order to provide the user with additional information needed to complete a requested action. (*Id.*)

151. The Newton System uses a unified data representation so that all data stored by all applications uses a common format. Then, "[d]ata can easily be shared among different applications, with no translation necessary," which allows for seamless integration between applications. (See Newton Guide at 1-5, ARENDI-DEFS00003701.)

152. Additional aspects of the Newton System are detailed in U.S. Patent No. 5,644,735 ("Luciw"), which was filed on April 19, 1995, and issued on July 1, 1997.

153. Luciw relates to Apple's pen-based, handheld Newton device. It discloses providing user assistance based on information entered into a document such as a note areas 54a and 54b displayed by a notepad application, as shown in Fig. 2 (see below). (2:19-22, ARENDI-DEFS00009587-615 at ARENDI-DEFS00009607; 6:24-59, ARENDI-DEFS00009609.)

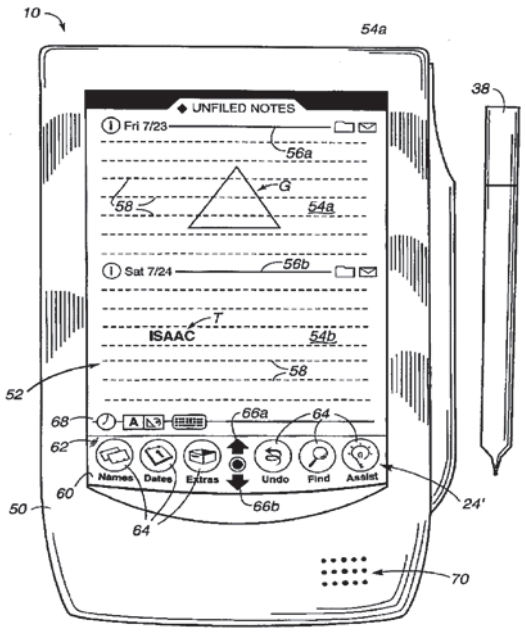

Figure 2

154. A user may select the "explicit assist" button 64 in Fig. 2, which then prompts the system to analyze the document in order to determine what type of assistance, if any is possible given the user's entry. (9:22-10:5, ARENDI-DEFS00009611; 13:52-14:4, ARENDI-DEFS00009613.) For example, if the user enters a first name, such as "Isaac," Luciw then searches a database and presents for user selection a list of names as shown in Figs. 6a and 6b (see below). (11:60-12:6, ARENDI-DEFS00009612.)

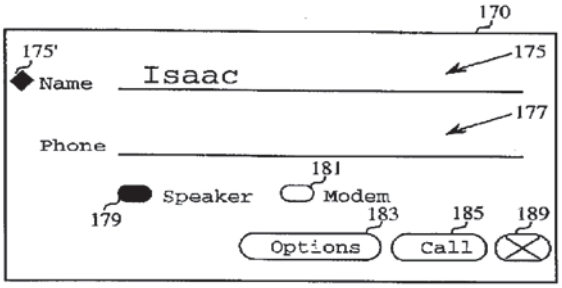

Figure 6a

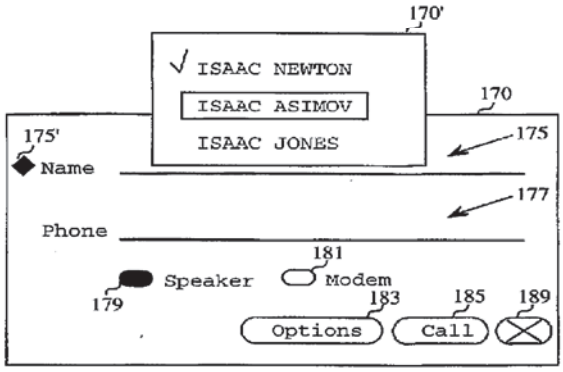

Figure 6b

155. When the user makes a selection from the list presented, information associated with the person, such as the person's full name, is inserted into the document. (*Id.*; 12:41-54.)

156. For a detailed, element-by-element analysis of how each the Newton System and Luciw discloses and suggests the various elements of the asserted claims of the patent-in-suit, *see* Exs. I and J.

E. Eudora PRO ("Eudora System")

Exhibit E

Claim Chart Applying Apple Data Detectors System Against the '843 Patent

The Apple Data Detectors System is made up of and evidenced by several products, publications, and other sources of evidence, including Apple Internet Address Detectors, US Geographic Detectors, and the deposition of James Miller ("Miller Depo.").

The Apple Internet Address Detectors ("IAD") product, also referred to as "Data Detectors," was offered for sale, sold, publicly disseminated, and publicly used in the United States at least by September 8, 1997. It therefore constitutes prior art under pre-AIA 35 U.S.C. § 102(a), (b) and (g).

An additional product named US Geographic Detectors 1.0 ("Geographic Detectors"), which utilized IAD, was offered for sale, sold, publicly disseminated, and publicly used in the United States around December 23, 1997 and therefore constitutes prior art under pre-AIA 35 U.S.C. § 102(a) and (g).

As shown below, an Apple computer system running IAD and Simple Text and/or Claris Emailer, and for some elements Geographic Detectors, ("IAD System") anticipates and/or renders obvious claims 1, 8, 13, 15, 17-19, 23, and 30 of the '843 patent. The IAD System constitutes prior art under pre-AIA 35 U.S.C. § 102(a) and (g) with Geographic Detectors and 102(a), (b), and (g) without Geographic Detectors.

"Obviousness Statement" - To the extent that the Judge or Jury finds that the Apple Data Detectors System does not teach an element either expressly or inherently, then the claim element is obvious to a POSITA based on the state of the art (*see, e.g.*, Section V of my Report), including the admissions of the prior art functionalities and motivations to combine those prior art functionalities in the '843 patent, as well as the motivations to combine and understandings of a POSITA discussed in my Report (*see, e.g.*, Section IX of my Report and Exhibit U), in light of the teachings of, at least, the prior art listed and discussed in Exhibit U, and each prior art system and/or reference listed in my Report, including, without limitation, Pandit, Chalas, Domini, Hachamovitch, Tso, Person, CyberDesk System (including specific publications describing aspects of the CyberDesk System), Eudora System (including specific publications describing aspects of the Eudora System), Apple Data Detectors System (including specific publications describing aspects of the Apple Data Detectors System), LiveDoc System (including specific publications describing aspects of the LiveDoc System), Newton System (including specific publications describing aspects of the Newton System), Microsoft Outlook 97 (including specific publications describing aspects of Microsoft Outlook 97), Selection Recognition Agent System (including specific publications describing aspects of the Selection Recognition Agent System), and Microsoft Word 97 (including specific publications describing aspects of Microsoft Word 97).

Evidence of the availability of IAD, Geographic Detectors, and the IAD System include the following:

- "Apple Introduces Internet Address Detectors," September 8, 1997
- US Geographic Detectors Read Me file, containing metadata of December 23, 1997 ("US Geographic Detectors 1.0 Read Me file")

Evidence of the design and operation of IAD, Geographic Detectors, and the IAD System include the following:

- "Apple Introduces Internet Address Detectors," September 8, 1997

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	detected, then the Apple Data Detectors would allow that phone number to be looked up in a contact database, a mailing address retrieved and then the mailing address inserted into a word processing document? MS. FRANKLIN: Objection to form. THE WITNESS: Yes." Miller Depo. at 156:2-9. "Q. Is it possible to write a script for the action that would instead of inserting that mailing address information into a new word processing document, to insert it into the open word processing email document that I started with? A. I believe so. It depends on the capabilities offered by the word processing application. But if the word processing application allowed you to insert text at some arbitrary place in it, I believe it would be able to. Q. And am I correct that that would be a relatively simple program to write? A. I believe so. Q. Approximately how long do you think it would take to write that program assuming that the word processing program itself would allow for insertion? A. Yes. Half hour." Miller Depo. at 157:18-158:12. "A. LiveDoc was a research project that was exploring a different way of handling the Data Detector matter where instead of having to manually select a region of text and clicking a mouse button and dealing with the pop-up menus, you could hold down a key and the display would highlight to show you the regions that had been found that under normal circumstances for Data Detectors would be shown in the hierarchal pop-up menu, but to actually show them as selectable regions on the screen. And then you could click on one of them on the screen and actually get the menu of actions attached to that item." Miller Depo. at 161:16-162:4. "Q. And again, when you're referring to initiating the grammatical analysis of the selected text, what is that referring to? A. That means instructing Data Detectors to run the selected texts through its set of structure recognizers, I guess." Miller Depo. at 165:11-16. "Q. So what are the kinds of things then that LiveDoc could find and then highlight for a user? A. Well, the same things that were found by the shipping version of Data Detectors. In fact, both the shipping version and LiveDoc used the same underlying Data Detector capability." Miller Depo. at 174:14-20.

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	"Q. When you say 'pointing at a highlight and pressing the mouse button,' I'm assuming that means if the user points at a highlight and presses the mouse button, the options are presented? A. Yes. If the user places the mouse cursor over the highlight and then presses the mouse button. Q. And then so if the user then clicks the mouse button, what happens? A. If they press down on the mouse button, then they get the menu of things that can be done to that item. Q. And how do they select one of those things? A. By dragging the mouse cursor to the desired item and releasing the mouse button. Q. So there's only one click involved in that, I think as you just described it? A. It's one click down to reveal the menu and then releasing the button to select the action. Or you can move off the selected region to some other part of the screen and let go, in which case the menu would just go away." Miller Depo. at 177:7-178:5. "So the LiveDoc manager gets the text from the visible part of the screen and looks for the recognizable patterns in it. Now, it does that just by looking at this long string of texts making up all the content of the screen. So as noted here, it might say that there is a particular pattern between – or in this substring of the character. The LiveDoc manager is the thing that is going to draw those highlights." Miller Depo. at 179:12-22. "[W]hy did you make LiveDoc its own separate piece of code where it had to exchange information with the application rather than just making it a part of every application? A. I think for much the same reason – I mean, this is going back quite a ways. But I think it was the same sort of logic as for making the Data Detector engine a separate thing. That by keeping the LiveDoc manager as an external component, we would be more able to connect into potentially more applications. We wouldn't be building LiveDoc capability into all of those applications. All we would – all we would need would be for that application to be able to tell the LiveDoc manager where on the screen are these characters." Miller Depo. at 180:11-181:3. "A. There would be an application showing you the contents of the document with some text in it. And so you would, with your mouse, drag out a region of that – of a document. You know, put the mouse cursor down, click the button, hold it down, drag it and you get the visual highlighting. And then you can let go and the section remains

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	highlighted. You would then hold down either the right button of a mouse, if you had the right kind of mouse, or hold down the control key and press the mouse button with the mouse cursor over the region of selected text. And that would display the hierarchal pop-up menu. It would be a list of the structures that Data Detectors had found, the email addresses, the phone numbers, things like that. And if you then with your mouse pointed at one of those structures, a new menu would be drawn off to the side showing the actions that could be carried out on that detected thing. If you picked one of those, a bit of code would run that would, for instance, launch an email program and open up a new email message addressed to that email message that had been found." Miller Depo. at 184:23-185:25. "A. If they loaded a document into the LiveDoc application, there was a menu item that you had to pick to enable LiveDoc that was just sort of a convenience for us as we were developing it. But if that had been enabled, then you would press down I believe the option key on the keyboard. And any structures in the visible part of that are document that had been recognized by Data Detectors would be highlighted. And at that time, while those were highlighted, you could point the mouse cursor at one of those structures, press down and you would get the menu of actions that could be applied to the item. Q. Okay. A. You would then select one and pick it and it would run just as it had run with Data Detectors." Miller Depo. at 186:4-23. For example (and without limitation to the Obviousness Statement that is incorporated into each element in this chart), this element is rendered obvious for the reasons stated in Exhibit U, Tables 1, 9, and 18.
displaying the document electronically using the first computer program;	The Apple Data Detectors System discloses this element. IAD could operate on text entered by a user. *See, e.g.* Miller Dep. at 74:10-14.

Exhibit E

	out into the finder, search through folders trying to find your telephone application, finally find it, launch it, find the part of the application that allows you to specify where you can enter a phone number and, you know, finally end up making your phone call." Miller Depo. at 78:8-16. "And so Data Detectors in that demonstration, were they being applied to only particular text or to the entire document? A. They were being applied to whatever part of the document had been selected. The yellow color here shows the text that has been selected by the user. I don't know exactly what selection took place, but it's certainly all of the text that is visible on the screen. Q. So everything that would be selected, if it was the entire document that was selected, the entire document would be analyzed? A. Yes. Q. And did the – does the user have to particularly designate somehow a particular piece of information like a telephone number that it wants to have detected? A. Well, Data Detectors will come back with that pop-up menu showing all of the structures that it found in the selected text." Miller Depo. at 119:14-120:8. "LiveDoc was a research project that was exploring a different way of handling the Data Detector matter where instead of having to manually select region of text and clicking a mouse button and dealing with the pop-up menus, you could hold down a key and the display would highlight to show you the regions that had been found that under normal circumstances for Data Detectors would be shown in the hierarchal pop-up menu, but to actually show them as selectable regions on the screen And then you could click on one of them on the screen and actually get the menu of actions attached to that item." Miller Depo. at 161:16-162:4. "There would be an application showing you the contents of the document with some text in it. And so you would, with your mouse, drag out a region of that – of a document. You know, put the mouse cursor down, click the button, hold it down, drag it and you get the visual highlighting. And then you can let go and the section remains highlighted." Miller Depo. at 184:23-185:5. "If they loaded a document into the LiveDoc application, there was a menu item that you had to pick to enable LiveDoc that was just sort of a convenience for us as we were developing it. But if that had been enabled, then you would press down I believe the

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	get the menu of actions attached to that item." Miller Depo. at 161:16-162:4. "And again, when you're referring to initiating the grammatical analysis of the selected text, what is that referring to? A. That means instructing Data Detectors to run the selected texts through its set of structure recognizers, I guess." Miller Depo. at 165:11-16. "Q. So what are the kinds of things then that LiveDoc could find and then highlight for a user? A. Well, the same things that were found by the shipping version of Data Detectors. In fact, both the shipping version and LiveDoc used the same underlying Data Detector capability." Miller Depo. at 174:14-20. "So the LiveDoc manager gets the text from the visible part of the screen and looks for the recognizable patterns in it. Now, it does that just by looking at this long string of texts making up all the content of the screen. So as noted here, it might say that there is a particular pattern between – or in this substring of the character. The LiveDoc manager is the thing that is going to draw those highlights." Miller Depo. at 179:12-22. "If they loaded a document into the LiveDoc application, there was a menu item that you had to pick to enable LiveDoc that was just sort of a convenience for us as we were developing it. But if that had been enabled, then you would press down I believe the option key on the keyboard. And any structures in the visible part of that are document that had been recognized by Data Detectors would be highlighted. And at that time, while those were highlighted, you could point the mouse cursor at one of those structures, press down and you would get the menu of actions that could be applied to the item. Q. Okay. A. You would then select one and pick it and it would run just as it had run with Data Detectors." Miller Depo. at 186:4-23. For example, in the screenshot below, which was taken during my Inspection of the Powerbook 3400C, while the text document was being displayed, the text "test1@apple.com" was highlighted in Note Pad with the mouse cursor and right-clicked. A menu then appeared that included the highlighted "test1@apple.com" text along with a sub-menu of actions associated with the highlighted "test1@apple.com" text. Data Detectors detected that "test1@apple.com" was an email address, and presented actions in the sub-menu associated with an email address.