EXHIBIT 4

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. 7,496,854
Issue Date: February 24, 2009
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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Petitioners Apple Inc., Google Inc., and Motorola Mobility LLC (collectively, "Petitioners") respectfully petition for *inter partes* review of claims 1-18, 36-56, 86-95, 97, 98, 100, and 101 of U.S. Patent No. 7,496,854 ("the '854 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 '854 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 '854 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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Google and Motorola Mobility identify 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 '854 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 '854 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 and address in a document being created with a word processing program. Through the use of a button, the document is searched and the name and address are detected. The detected information is then used with respect to a second application program, such as a database. For example, the user can add the name and address to an address book as a new entry, or edit or add additional address information associated with the name if the name is already in the address book. If the user types only a name into the document and the database has the name and a corresponding address, the user can insert the address for the name into the document being created by the word processing program.

The claims of the '854 patent may be divided into two groups: (1) claims directed to performing an operation, such as updating a database with an address; and (2) claims directed to inserting information into the document, such as an address. This Petition addresses the second set of claims (*i.e.*, claims 1-18, 36-56, 86-95, 97, 98, 100, and 101). A related petition, filed concurrently, addresses the first set of claims (*i.e.*, claims 19-35, 57-85, 96, and 99). Two other petitions, also filed concurrently, address related U.S. Patents Nos. 7,917,843 and 8,306,993.

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 '854 patent. Section III of this Petition summarizes the '854 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 '854 PATENT

A. Background Of The '854 Patent

The '854 patent is directed to name and address handling within a document created by a computer program, such as a word processing program. (1:19-27.) 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.

Example 1 relates to 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. (6:13-17; 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.

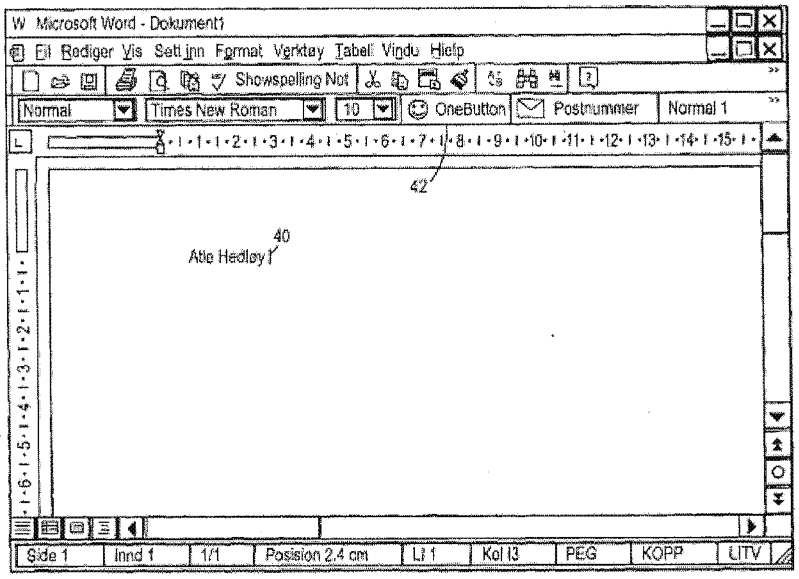


FIG. 3

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 '854 Patent

Throughout the prosecution of the '854 patent, Applicant argued that the distinguishable feature over the applied art was marking information or identifying information, such as a name and address in a document, "without user intervention." For example, in an Amendment dated January 24, 2008, at 31 (Ex. 1003), Applicant asserted:

> Thus, Pandit teaches a system where the user must select text prior to the system processing the "a selected text", e.g. col. 5, line 56). Neither the AddressMate program nor Pandit teach the element of "marking without user intervention" or "identifying without user intervention or designation the first information" either alone or in combination.

As set forth below, such marking or identifying information without user intervention was well-known in the art.

IV. CLAIM CONSTRUCTION

Petitioners provide constructions of a term and the means-plus-function limitations. *See* 37 C.F.R. § 42.104(b)(3). 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). Furthermore, a number of claims contain means-plus-function limitations under 35 U.S.C. § 112, ¶ 6 (pre-AIA).

A. "Marking … The First Information To Alert The User"

The recitation "marking … the first information to alert the user" appears in numerous independent claims. (*See* Claims 1, 7, 13.) However, neither the term "marking" nor the full recitation appears in the specification. The '854 patent is a continuation of application No. 09/189,626 filed on November 10, 1998, and the "marking" recitation was not added until the application that matured into the '854 patent was filed years later in August 6, 2001. Therefore, the specification gives no guidance as to the meaning of this recitation. Accordingly, the plain meaning of the recitation is that the first information is detected without user intervention and has some form of marking or highlighting applied to it to draw the user's attention to it. (Menascé Decl. ¶ 49.)

During prosecution, Applicant attempted to provide an expansive reading of "marking" in order to demonstrate support for the recitation, and asserted that the program "marks the 'first information' in any of a variety of ways" and "may display the text (the 'first information') to the user." (Amendment dated April 18, 2007 (Ex. 1004), at 30-31.) The portions of the specification identified relate to generating another screen, *e.g.*, Fig. 9, and not to any direct marking of the first information itself (which is already displayed in the document) to provide the recited alerting function. Therefore, because the only possible disclosure of marking to alert in the specification is provision of a separate dialog box, for this proceeding the marking to alert recitation should be construed to encompass both direct marking (*e.g.*, highlighting or a pop-up at the information being marked) and display of the information in a separate dialog box.

B. Means-Plus-Function Limitations

For means-plus-function limitations, 37 C.F.R. § 42.104(b)(3) requires the petition to identify the structure corresponding to each claimed function. However, a structure that is not actually disclosed in the specification *cannot* be corresponding structure. *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 948, 952 (Fed. Cir. 2007).

In IPR2013-00152, the Patent Trial and Appeal Board denied institution of an *inter partes* review because, among other reasons, the means-plus-function limitations were not amenable to construction. Specifically, the Board analyzed the specification and concluded that there was no corresponding structure disclosed in the specification to perform the recited function of various limitations. (Decision (Paper 8 dated August 19, 2013), at 12, 13, 20.) It is submitted that the same situation exists with respect to the claims in this Petition having means-plus-function limitations, *i.e.*, claims 13-18, 50-56, 100, and 101, which are only a subset of the total claims at issue in this Petition.

1. Independent Claim 13 And Dependent Claims 14-17

Claim 13 includes three limitations, which are all means-plus-function elements, with the recited functions underlined below.

Limitation/Recited Function	Corresponding Structure
means for entering a first information in the first application program	Keyboard along with its device driver at Fig. 16 and 9:37-39. (Menascé Decl. ¶¶ 51-54.)
means for marking without user intervention the first information to alert the user that the first information can be utilized in a second application program	None. Boxes 4, 6 and 4:25-39 simply show desired results, with no algorithm disclosing what is done. (Menascé Decl. ¶¶ 55-59.)
means for responding to a user selection by inserting a second information into the document, the second information associated with the first information from a second application program	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 60-65.)

Dependent claim 14 includes an additional means plus function limitation, with the recited functions underlined below.

Limitation/Recited Function	Corresponding Structure

means for an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device [The recited function is "activating a device ..."]	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 66-70.)

Dependent claim 15 includes three additional means plus function limitations, with the recited functions underlined below.

Limitation/Recited Function	**Corresponding Structure**
means for initializing the second application program	None. (Menascé Decl. ¶¶ 71-75.)
means for searching, using the second application program, for the second information associated with the first information	Figs. 1 and 2 (steps 12 or 14) described on 4:43-46 and 5:12-16; Examples 1, 2, 4, 5, and 6 discussed in the specification. (Menascé Decl. ¶¶ 76-80.)
means for retrieving the second information.	Figs. 1 (steps 18 and 20) 2 (steps 26 and 30 or steps 26 and 27 or steps 29, 31, and 30) described on 4: 43-49, 5: 23-53;

	Examples 1 and 5 discussed in the specification. (Menascé Decl. ¶¶ 81-85.)

Dependent claim 16 includes an additional means plus function limitation, with the recited functions underlined below.

Limitation/Recited Function	**Corresponding Structure**
means for performing the further step of <u>displaying the second information</u>	Figs. 1 and 2 (step 20) described on 4:46-49 and 5:12-16; Example 5 discussed in the specification. (Menascé Decl. ¶¶ 86-88.)

Dependent claim 17 includes an additional means plus function limitation, with the recited functions underlined below.

Limitation/Recited Function	**Corresponding Structure**
means for <u>completing at least one of the first and second information in the document</u>	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 89-92.)

2. Independent Claim 50 And Dependent Claims 51-55

Claim 50 includes two means-plus-function limitations, with the recited functions underlined below.

Limitation/Recited Function	Corresponding Structure
means for identifying without user intervention or designation the first information	None. Boxes 4, 6 and 4:25-39 simply show desired results, with no algorithm disclosing what is done. (Menascé Decl. ¶¶ 93-97.)
means for responding to a user selection by inserting a second information into the document, the second information associated with the first information from a second application program	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶ 98.)

The analysis for claim 51 is the same as dependent claim 14. The analysis for claim 52 is the same as dependent claim 15.

Claim 53 includes an additional means-plus-function limitation, with the recited functions underlined below.

Limitation/Recited Function	Corresponding Structure
means for adding the second	No structure disclosed in the

information to the first information in the document	specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 103-108.)

The analysis for claim 54 is the same as dependent claim 16. (Menascé Decl. ¶ 110.) The analysis for claim 55 is the same as dependent claim 17. (Menascé Decl. ¶ 112.)

3. Independent Claim 100

Independent claim 100 includes three means-plus-function limitations, with the recited functions underlined below.

Limitation/Recited Function	Corresponding Structure
(1) means for using a first computer program to analyze the document, without direction from the operator, to identify the name	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 113-117.)
(2) means for using the identified name and a second computer program to search the database and to locate contact related information associated with the name	Figs. 1 and 2 (step 12) described on 4:43-46 and 5:12-16; Examples 1 and 5 discussed in the specification. (Menascé Decl. ¶¶ 118-122.)

(3) means for inserting the contact related information into the document	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 123-128.)

4. Independent Claim 101

Independent claim 101 includes five means-plus-function limitations, with the recited functions underlined below.

Limitation/Recited Function	Corresponding Structure
(1) means for using a first computer program to analyze the document, without direction from the operator, to identify text in the document that can be used to search for related information	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 129-133.)
(2) means for using a second computer program and the text identified in (1) to search the database and to locate related information	Figs. 1 and 2 (step 12) described on 4:43-46 and 5:12-16; Examples 1 and 5 discussed in the specification. (Menascé Decl. ¶¶ 134-138.)

(3) means for inserting the information located in (2) into the document	No structure disclosed in the specification that corresponds to the claimed function. (Menascé Decl. ¶¶ 139-144.)

C. 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 1-18, 36-56, 86-95, 97, 98, 100, and 101 of the '854 patent based on the following references.

Reference	Designated Name/Exhibit No.
SIGCHI Bulletin (April 1998) at 51-63	LiveDoc/Drop Zones (Ex. 1005)
U.S. Patent No. 5,577,239 to Moore et al.	Moore (Ex. 1006)
U.S. Patent No. 6,085,206 to Domini et al.	Domini (Ex. 1007)
U.S. Patent No. 6,377,965 to Hachamovitch et al.	Hachamovitch (Ex. 1008)
U.S. Patent No. 5,644,735 to Luciw et al.	Luciw (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	102(a)	1-18, 36-56, 93-95, 98, and 101	LiveDoc/Drop Zones
2	103(a)	1-18, 36-56, 93-95, 98, and 101	LiveDoc/Drop Zones
3	103(a)	1-18, 36-56, 93-95, 98, and 101	LiveDoc/Drop Zones and Moore
4	102(e)	1-18, 36-38, 40-45, 49-52, 54-56, 93, 98, and 101	Domini
5	102(e)	1-18, 36-56, 86, 87, 89, 93, 97, 98, 100, and 101	Hachamovitch
6	103(a)	3-5, 9-11, 15-17, 38-41, 45-48, 53, 88, 90, and 91	Hachamovitch
7	102(e)	1-18, 36-56, 86-88, 90, 92-94, 97, 98, 100, and 101	Luciw
8	103(a)	3-5, 9-11, 15-17, 38-41, 45-48, 53, 87, 89, 91, and 95	Luciw

Below is a discussion of why the challenged claims of the '854 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.

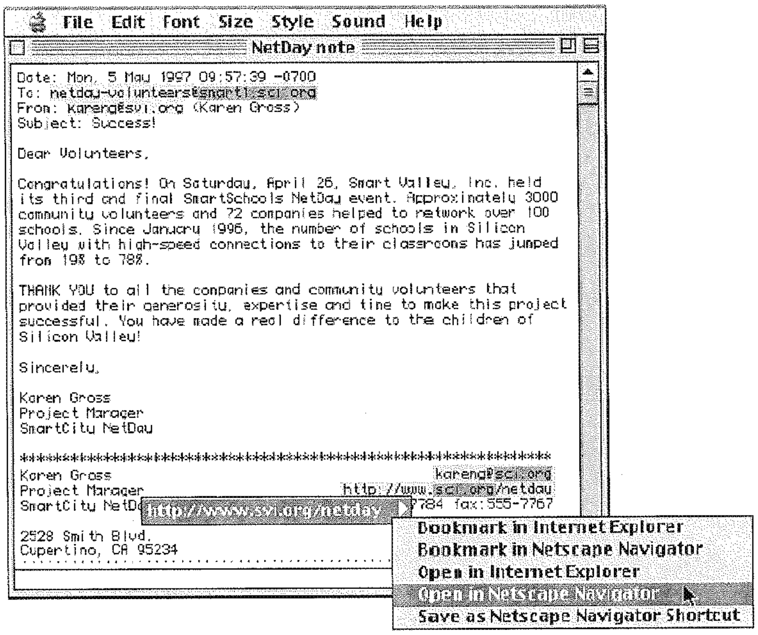
VI. GROUNDS BASED ON LIVEDOC/DROP ZONES

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 '854 patent.

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

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


File
Edit
Font
Size
Style
Sound
Help
NetDay note
http://www.svi.org/netday
Bookmark in Internet Explorer
Bookmark in Netscape Navigator
Open in Internet Explorer
Open in Netscape Navigator
Save as Netscape Navigator Shortcut

```
Date: Mon, 5 May 1997 09:57:39 -0700
To: netday-volunteers@smart1.sci.org
From: kareng@svi.org (Karen Gross)
Subject: Success!

Dear Volunteers,

Congratulations! On Saturday, April 26, Smart Valley, Inc. held
its third and final SmartSchools NetDay event. Approximately 3000
community volunteers and 72 companies helped to network over 100
schools. Since January 1996, the number of schools in Silicon
Valley with high-speed connections to their classrooms has jumped
from 19% to 78%.

THANK YOU to all the companies and community volunteers that
provided their generosity, expertise and time to make this project
successful. You have made a real difference to the children of
Silicon Valley!

Sincerely,

Karen Gross
Project Manager
SmartCity NetDay

***************************************************************
Karen Gross                                     kareng@sci.org
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Figure 2: A sample interaction with LiveDoc. Note the highlighting of the discovered structures, the menu of actions available or the selected structure, and the nested highlighting of nested structures.

Without user intervention, LiveDoc's "structure detection" process runs in the background and highlights information in the document that can be used to perform a related action. (LiveDoc at 54-55.) Selecting a highlighted structure displays a menu of actions that can be performed. (*Id.*) As just one example, LiveDoc can identify a molecular formula in a document and provide an action that presents a three-dimensional rendering of the molecule in the document itself. (LiveDoc at 57-58.) This would be achieved through searching a database containing the three-dimensional rendering based on the molecular formula identified in the document.

B. Ground 1: Anticipation By LiveDoc/Drop Zones

1. Method Claims

Method claims 1-6, 36-42, and 93-95 are anticipated by LiveDoc/Drop Zones as set forth below.

Claim	LiveDoc/Drop Zones
[1a] 1. A method for information handling within a document created using a first application program comprising the steps of:	LiveDoc discloses a document created using a first application program (*e.g.*, a document as shown in Fig. 2 created using a text entry application program). *See also* 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 55 ("[W]e decided to modify a simply text editor application, SimpleText, to be a LiveDoc client."). Drop Zones uses the same program. *See*, *e.g.*, at 60 (referring to a "LiveDoc enabled word processor, *LiveSimpleText*").
[1b] entering a first information in the first application program;	A document including first information, such as a molecular formula, is entered in the first application program such as a word processor. 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.") (emphasis added). *See also* Fig. 2 of LiveDoc and Fig. 2 in Drop Zones. Word processor is *LiveSimpleText.*
[1c] marking without user intervention the first information to alert the user that the first information can	In LiveDoc, the first information, such as a molecular formula, is marked without user intervention to alert the user that the first information can be utilized in a second

be utilized in a second application program; and	application program, such as a database application to retrieve a rendering of the molecule. *Marking and alerting* – 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."); *see also* LiveDoc at 55 ("In LiveDoc, the structure detection process is run in the background on the visible document's text, whenever that document is presented or updated. The results of LiveDoc's analysis are then presented by visually highlighting the discovered structures with a patch of color around the structure. … 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."); at 55 ("Experientially, the design of LiveDoc draws on the Web in obvious ways: certain meaningful parts of a document are highlighted, and clicking on them causes certain actions to occur."). *Second application program* – LiveDoc discloses obtaining a rendering of a molecule for a formula identified in a document. *See, e.g.*, 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."). LiveDoc's discussion of a rendering of the molecule discloses a database program application containing the rendering. This database program application is a second application.
[1d] responding to a user selection by inserting a second	The rendering of the molecule associated with the identified molecular formula is "presented within

information into the document,	the context of the document" (*i.e.*, inserted into the document) based on user "action." *See, e.g.*, 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.") (emphasis added).
[1e] the second information associated with the first information from a second application program.	The rendering of the molecule (second information) is associated with the identified molecular formula (first information). *See* claim 1d.

2. The method of claim 1 wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device.	LiveDoc discloses user selection via activation of a menu. *See, e.g.*, 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."); 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.") (emphasis added).

[3a] 3. The method of claim 1, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 1.
[3b] initializing the second application program;	The second application program must necessarily be initialized in order to function.
[3c] searching, using the second application program, for the second information associated with the first information; and	Searching must necessarily be done in the database application program containing the rendering linked to the molecular formula identified in the document. *See* claims 1c-d.
[3d] retrieving the second information.	The rendering is retrieved as a result of the search. *See* claims 1c-d.

4. The method of claim 3, wherein when the second application program includes second information associated with the first information, performing the further step of displaying the second information.	The first application program displays the rendering for the user. *See also* claims 1b and 1d.

5. The method of claim 4, further comprising the step of completing at least one of the first and second information in the document.	The second information is completed by inserting a rendering of the molecule into the document corresponding to the entered molecular formula. *See* claim 1d.

6. The method of claim 1, wherein the first information comprises a name.	A molecular formula is a type of name for a molecule as it identifies the molecule.

[36a] 36. A method for information handling within a document operated on by a first application program, the document containing first information that can be utilized in a second application program, the method comprising the steps of:	LiveDoc discloses a method for information handling within a document operated on by a first application program. *See* claim 1a. The document contains first information that can be utilized in a second application program. *See* claims 1b-c.
[36b] identifying without user intervention or designation the first information; and	LiveDoc identifies the first information without user intervention or designation. *See, e.g.*, LiveDoc at 55 ("In LiveDoc, the structure detection process is run in the background on the visible document's text, whenever that document is presented or updated.") and ("LiveDoc's use of background processing and automatic highlighting of discovered structures offers other advantages. Structures relevant to the user are

	automatically presented to the user while a document is in LiveDoc mode; interesting structures need not be searched for and highlighted manually."). *See also* claim 1c.
[36c] responding to a user selection by inserting a second information into the document,	*See* claim 1d.
[36d] the second information associated with the first information from a second application program.	*See* claim 1e.

37. The method of claim 36, wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device.	*See* claim 2.

[38a] 38. The method of claim 36, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 3a.
[38b] initializing the second application program;	*See* claim 3b.
[38c] searching, using the second application program, for the second information associated with the first information; and	*See* claim 3c.
[38d] retrieving the second information.	*See* claim 3d.

39. The method of claim 38	The rendering of the molecule corresponding to

wherein the step of inserting the second information into the document further comprises adding the second information to the first information in the document.	the formula is added to the document. *See, e.g.*, 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.").

40. The method of claim 38, wherein when the second application program includes second information associated with the first information, performing the further step of displaying the second information.	*See* claim 4.

41. The method of claim 38, further comprising the step of completing at least one of the first and second information in the document.	*See* claim 5.

42. The method of claim 36, wherein the first information comprises a name.	*See* claim 6.

[93a] 93. A method for assisting a computer operator to retrieve information from a database that is related to text in a document, the method comprising the steps of:	LiveDoc discloses a method for assisting a user to retrieve information that is related to text in a document; for example, retrieving a rendering of a molecule associated with a molecular formula identified in a document. *See* claim 1.
[93b] (1) using a first computer program to analyze the document, without direction from the operator, to identify text in the document that can be used to search for	LiveDoc (first computer program) analyzes the document, without direction from the operator, to identify text that can be used to search for related information, such as a molecular formula. *See* claims 1c and 36b.

related information,	
[93c] (2) using a second computer program and the text identified in step (1) to search the database and to locate related information, and	Using a second computer program and the formula identified in the document, LiveDoc retrieves a rendering for the molecule. *See* claims 1c, 1d and 3c.
[93d] (3) inserting the information located in step (2) into the document.	The rendering of the molecule is inserted into the document. *See* claims 1d and 36c.

94. The method according to claim 93 wherein at least steps (2)-(3) take place following entry a single execute command.	LiveDoc searches for and inserts the rendering of the molecule following the user's selection of the action from a menu (*i.e.*, a single execute command). *See* claims 1d and 2.

95. The method according to claim 94 wherein the execute command is a selection from a menu.	*See* claim 2.

2. Computer Readable Medium And System Claims

Computer readable medium claims 7-12, 43-49, and 98 are anticipated by LiveDoc/Drop Zones. These claims correspond to method claims 1-6, 36-42, and 93. LiveDoc/Drop Zones discloses 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)).

System claims 13-18, 50-56, and 101, which include means-plus-function limitations, are also anticipated by LiveDoc/Drop Zones. These claims correspond to method claims 1-6, 36-42, and 93. LiveDoc/Drop Zones discloses the functions of the means-plus-function limitations (as set forth above with respect to the corresponding method claims). LiveDoc/Drop Zones discloses a processor (*see, e.g.*, LiveDoc at 57) programmed to perform these functions, and the programmed processor is the same or equivalent structure as that disclosed in the '854 patent (if any structure is disclosed at all).

C. Ground 2: Obviousness based on LiveDoc/Drop Zones

Claims 1-18, 36-56, 93-95, 98, and 101 are additionally obvious in view of LiveDoc/Drop Zones. (Menascé Decl. ¶ 151.) As noted above, LiveDoc discloses inserting second information, such as a molecule rendering, into the document itself. Drop Zones discloses that a name in a document can be detected and, based upon the detected name, a person's information may be added to an address book. *See, e.g.*, Drop Zones at 60 ("Add this person to my address book."). In view of LiveDoc's disclosure that information related to detected information can be added into the document, it would have been obvious to one of ordinary skill in the art that information already contained in an address book, such as an address corresponding to a detected name, could be added to the document. (*Id.* ¶ 151.) Such would simply be another obvious operation of entering related information into the document, as names and addresses are commonly entered together in documents such as letters. (*Id.*)

Furthermore, claims 3, 9, 15, 38, 45 and 53 and any respective dependent claims recite initializing the second application program and searching using the second application program for the second information. These steps would have been obvious in view of LiveDoc and Drop Zones. (Menascé Decl. ¶ 152.) As a matter of common sense, it would have been obvious for the address book application, for example, to be initialized in order to run and search for the name, so as to allow a user to enter a person's information as to the detected name. (*Id.*)

D. Ground 3: Obviousness In View Of LiveDoc/Drop Zones And Moore

Claims 1-18, 36-56, 93-95, 98, and 101 are additionally obvious in view of LiveDoc/Drop Zones and Moore. Moore issued on November 19, 1996 and thus qualifies as prior art under § 102(b) based on the earliest alleged U.S. filing date of the '854 patent. As discussed in Ground 1, LiveDoc can identify a molecular formula in a document and provide an action that presents a rendering of the molecule in the document itself. (LiveDoc at 57-58.) LiveDoc's discussion of a rendering of the molecule discloses searching a database containing the rendering based on the molecular formula identified in the document.

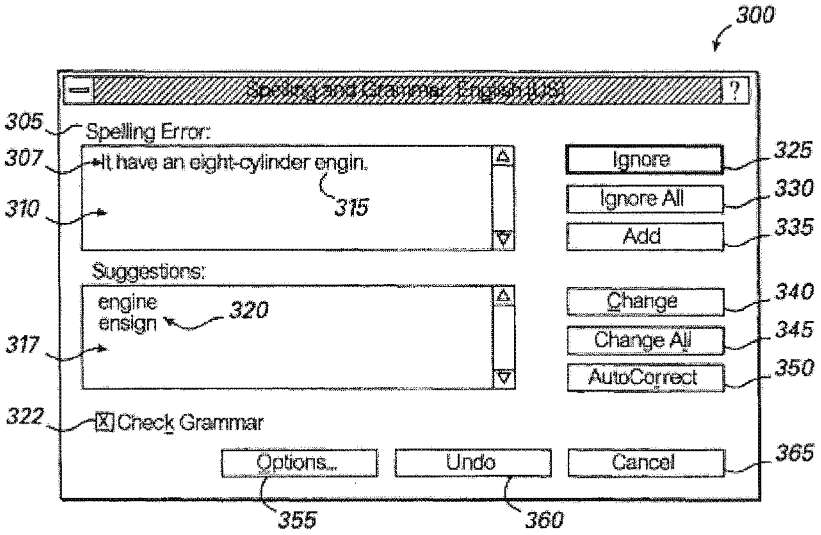
Furthermore, it was known to have chemical databases searchable by chemical name or molecular formula. (Menascé Decl. ¶ 154.) For example, Moore discloses an exemplary chemical structure storage, searching, and retrieval system and that can be "adapted to numerous types of technology." (Title;

Abstract; 2:16-30.) The system employs a relational database application that can search a database based upon chemical name or molecular formula and display a corresponding image. (Moore at 2:43-54; Fig. 10.) Thus, it would have been obvious to employ Moore's database application (as the second application program or computer program in independent claims 1, 7, 13, 36, 43, 50, 93, 98 and 101) to implement LiveDoc's action of inserting a rendering of a molecule in the document. Moore's application would be able to obtain the rendering from its database based on the identified chemical name or molecular formula. This would be a simple combination of prior art elements according to known methods to yield predictable results. (Menascé Decl. ¶ 154.) It should be emphasized that LiveDoc's disclosure is not in any way limited to inserting chemical content from a chemical database in a document. This is just one example provided by LiveDoc.

VII. GROUND BASED ON DOMINI

A. Background Of Domini

Domini was filed on June 20, 1996 and thus qualifies as prior art under § 102(e) based on the earliest alleged U.S. filing date of the '854 patent. Domini discloses identifying and correcting spelling errors in a document created by a word processing program. (Abstract; 4:65-5:11.) The user selects the "spelling and grammar" command to initialize the spell check program. (16:13-16.) Without user intervention, the spell check program identifies misspelled words and presents them in red, bold typeface. (17:27-33; 4:12-16.) The spell check program also displays a list of suggested corrections, as shown in Fig. 3 below. (1:42-44; 12:1-5.) When the user selects the "Change" button 340, the suggested correction selected by the user is inserted into the document. (12:61-64.)


Spelling and Grammar: English (US)

Spelling Error:

It have an eight-cylinder engin.

Suggestions:

engine
ensign

☒ Check Grammar

FIG.3

B. Ground 4: Anticipation Based On Domini

1. Method Claims

Method claims 1-6, 36-38, 40-42, and 93 are anticipated by Domini as set forth below.

Claim	Domini
[1a] 1. A method for information handling within a document created using a first application program comprising the steps of:	Domini discloses a method for identifying and correcting spelling errors within a document created by a word processor program (first application program). *See, e.g.*, Abstract ("In an electronic word processing system environment, a system and method for verifying the accuracy of the grammatical composition of a sentence and the spelling of words within the sentence in an

	electronic document.”).
[1b] entering a first information in the first application program;	A user enters words and sentences (first information) into the word processor (first application program). *See, e.g.*, 5:1-7 (“The preferred embodiment of the present invention is represented by ‘WORD’, version 8.0, which is a word processing application program … Briefly described, the preferred program allows users to create and edit electronic documents by entering characters, symbols, graphical objects, and commands.”).
[1c] marking without user intervention the first information to alert the user that the first information can be utilized in a second application program; and	Without user intervention (*see, e.g.*, 3:31-41), the spell check program identifies a potentially misspelled word and marks it by presenting the word in red, bold typeface to alert the user the word can be utilized in the database, *i.e.*, dictionary, of the spell check program. *Marking to alert* – 4:12-16 (“It is determined whether any of the words in the sentence are misspelled and an indication, such as presenting the misspelled word in red, bold typeface, is provided for any misspelled words.”); Fig. 3; 11:55-60 (blinking cursor). *Second application program* – Fig. 1 identifies word processing program 37A and spell checker program 37B, which includes one or dictionaries, as different application programs. *See e.g.*, Fig. 1; 7:41-51 (“The application programs 37 may include a number of different programs such as a word processing program 37a, a spell checker program 37b, and a grammar checker program 37c.”); 16:66-17:57 (standard and custom dictionaries); 7:41-51; 1:56-61.
[1d] responding to a user selection by inserting a second information into the document,	The user can select a suggested correction, which is then inserted into the document. *Second information* – Second information is a list of suggested corrections for an identified

	misspelled word. 12:1-5 ("Still referring to FIG. 3, the combined spelling and grammar dialog box 300 includes a suggestion list box 317. The suggestion list box 317 includes a plurality of suggestions 320 to replace the possible spelling error in the sentence 307."). *Inserting second information* – Figs. 3, 5, and 7; 12:61-64 ("If the user selects the Change button 340, the misspelled word 315 will be replaced with the word that has been selected by the user from the suggestions 320 in the suggestion list box 317.").
[1e] the second information associated with the first information from a second application program.	Each suggested correction (second information) for a misspelled word is associated with the misspelled word (first information).

2. The method of claim 1 wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device.	The user selects the "Change" button. *See, e.g.*, Fig. 3; 12:61-64 ("If the user selects the Change button 340, the misspelled word 315 will be replaced with the word that has been selected by the user from the suggestions 320 in the suggestion list box 317."); 18:21-24.

[3a] 3. The method of claim 1, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 1.
[3b] initializing the second application program;	The spell check program having one or more dictionaries is called and initiated. *See, e.g.*, 16:56-57 ("Referring to FIG. 7, the spell checker program module is called at step 705 and a spell checking session is initiated.").
[3c] searching, using the	The spell check program having one or more

second application program, for the second information associated with the first information; and	dictionaries (second application program) provides suggested corrections for a misspelled word (first information). The spell check program searches the dictionary database for the suggested corrections. *See, e.g.*, 16:66-17:57 (standard and custom dictionaries); 18:4-9 ("[T]he preferred application program consults another part of the SRB [Spell Return Buffer] to locate a string buffer containing suggestions from the spell checker program module at step 735. The suggestions are the information that is displayed in the suggestion list box 317 as shown in Fig. 3.").
[3d] retrieving the second information.	The suggested corrections are retrieved from the spell check program and displayed for the user. *See* claim 3c.

4. The method of claim 3, wherein when the second application program includes second information associated with the first information, performing the further step of displaying the second information.	The spell check program searches the dictionary database for the suggested corrections (second information) associated with the misspelled word (first information) and displays the suggestions for the user. *See, e.g.*, 18:7-9 ("The suggestions are the information that is displayed in the suggestions list box 317 as shown in FIG. 3."). *See also* claims 1d and 3c.

5. The method of claim 4, further comprising the step of completing at least one of the first and second information in the document.	When a user selects the "Change" button, the misspelled word is replaced by a suggested correction (*i.e.*, the misspelled word is completed accurately). *See* claim 1d.

6. The method of claim 1, wherein the first information comprises a name.	The misspelled word can be a name. 11:36-40 ("[T]hose skilled in the art will understand that some words, such as proper names, may not be recognized by the spell checker program module and may be flagged as spelling errors even though they are correctly spelled.").

[36a] 36. A method for information handling within a document operated on by a first application program, the document containing first information that can be utilized in a second application program, the method comprising the steps of:	Domini discloses information handling within a document operated on by a first application program. *See* claim 1a. The document contains first information that can be utilized in a second application program. *See* claims 1b-c.
[36b] identifying without user intervention or designation the first information; and	Without user intervention, the spell check program detects words and identifies a potentially misspelled word in the document (first information). *See, e.g.*, 17:27-33 ("As is well-known in the art, a spell checker program module checks the spelling of a word by comparing the word to the list of words in the standard dictionary and custom dictionaries. If the word does not correspond to one of the words in the standard dictionary or custom dictionaries, then the spell checker program module flags the word as a word that is possibly misspelled."); Figs. 3, 5 and 7. *See also* claim 1c.
[36c] responding to a user selection by inserting a second information into the document,	*See* claim 1d.
[36d] the second information associated with the first information from a second application program.	*See* claim 1e.

37. The method of claim 36, wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a	*See* claim 2.

menu, and a voice command device.	

[38a] 38. The method of claim 36, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 3a.
[38b] initializing the second application program;	*See* claim 3b.
[38c] searching, using the second application program, for the second information associated with the first information; and	*See* claim 3c.
[38d] retrieving the second information.	*See* claim 3d.

40. The method of claim 38, wherein when the second application program includes second information associated with the first information, performing the further step of displaying the second information.	*See* claim 4.

41. The method of claim 38, further comprising the step of completing at least one of the first and second information in the document.	*See* claim 5.

42. The method of claim 36, wherein the first information comprises a name.	*See* claim 6.

[93a] 93. A method for assisting a computer operator	Domini discloses a method for assisting a user to retrieve suggested corrections from a database for

to retrieve information from a database that is related to text in a document, the method comprising the steps of:	misspelled words in a document. *See* claim 1.
[93b] (1) using a first computer program to analyze the document, without direction from the operator, to identify text in the document that can be used to search for related information,	The spell check program includes a first computer program to analyze the document, without direction from the operator, to locate potentially misspelled words. *See* claims 1c and 36b.
[93c] (2) using a second computer program and the text identified in step (1) to search the database and to locate related information, and	Using the misspelled word identified, the spell check program searches a dictionary (*i.e.*, database) to search for suggested corrections. *See* claims 1d and 3c.
[93d] (3) inserting the information located in step (2) into the document.	When the user selects the "Change" button the selected suggested correction is inserted into the document. *See* claim 1d.

2. Computer Readable Medium And System Claims

Computer readable medium claims 7-12, 43-45, 49, and 98 are anticipated by Domini. These claims correspond to method claims 1-6, 36-38, 42, and 93. Domini discloses 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 15).

System claims 13-18, 50-52, 54-56, and 101, which include means-plus-function limitations, are also anticipated by Domini. These claims correspond to method claims 1-6, 36-38, 40-42, and 93. Domini discloses the functions of the means-plus-function limitations (as set forth above with respect to the corresponding method claims). Domini discloses a processor (*see*, *e.g.*, Fig. 1 at 14) programmed to perform these functions, and the programmed processor is the same or equivalent structure as that disclosed in the '854 patent (if any structure is disclosed at all).

VIII. GROUNDS BASED ON HACHAMOVITCH

A. Background Of Hachamovitch

Hachamovitch was filed on November 7, 1997 and thus qualifies as prior art under § 102(e) based on the earliest alleged U.S. filing date of the '854 patent. Hachamovitch discloses an auto-complete program that identifies a user's text entry and suggests a completion entry. (4:10-20.) When the user enters text into a document, such as a word processing document, the system identifies the partial entry and displays an associated auto-complete suggestion name directly above the partial entry, as shown in Fig. 2B below. (*See also* Figs. 2A-2C; 10:31-37.)

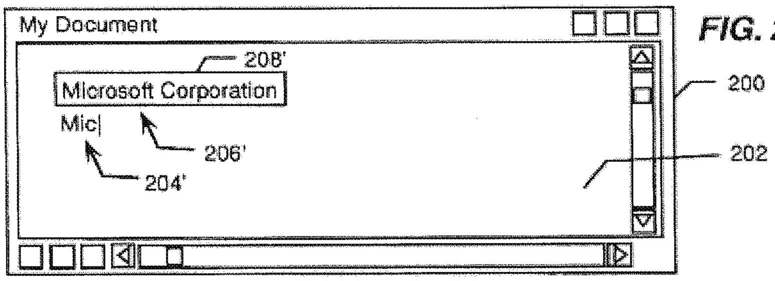


FIG. 2B

The user can select the suggestion and insert it into the document by pressing a suggestion acceptance key, such as the "tab" key. (7:4-5; 5:7-10.) The suggestion entry name can be related to additional contact information, such as an address, associated with a name entered into the document. For example, the name "Microsoft Corporation" can have completion information associated with it that includes both the name and address of Microsoft Corporation, as shown in Fig. 3. (7:18-61.) An address book may be used as a suggestion list.

B. Ground 5: Anticipation Based On Hachamovitch

1. Method Claims

Method claims 1-6, 36-42, 86, 87, 89, and 93 are anticipated by Hachamovitch as set forth below.

Claim	Hachamovitch
[1a] 1. A method for information handling within a document created using a first application program comprising the steps of:	Hachamovitch discloses a system that provides auto-complete suggestions for partial entry in a document created using a first application program, such as a word processor. *See, e.g.*, 4:10-13 ("The present invention is a word completion system that can automatically predict unrestricted word completions for data entries in an unstructured portion of a data file, such as the body of a word processing document or email message.").
[1b] entering a first information in the first application program;	The user enters text, such as a name, into the word processing document. *See, e.g.*, Figs. 2A-2C; 10:21-24 ("The graphical user interface 200 includes an unstructured area 202 into which the user may enter free text using the keyboard 40 or another suitable text entry device.").
[1c] marking without user intervention the first information to alert the user that the first information can be utilized in a second	Without user intervention, text entered by the user is identified as a partial data entry, and a completion suggestion is displayed directly above the partial data entry (*i.e.*, marked) to alert the user that the auto-complete program can retrieve

application program; and	and insert associated text. *Marking and alerting* – *See, e.g.*, Figs. 2A-2C; 10:31-37 ("The host application program causes the partial data entry to be displayed in the usual manner, and the Auto-Complete utility 100 causes a completion suggestion 206 to be displayed in association with the partial data entry in a non-disruptive word completion field, such as a pop-up word completion frame 208 that appears directly above the partial data entry."). *Second application program* – The auto-complete program is a stand-alone application that searches using a suggestion list database, such as an e-mail address book (second application program), for suggested corrections. *See, e.g.*, 7:65-8:5 ("[T]he word completion system may be deployed within an operating system or as a stand-alone utility that may operate on an application-independent basis."); 7:18-61 (" … For example, an e-mail address book may be used as the suggestion list when a user is typing within a structured address frame of an e-mail user interface. …"); 4:60-5:6; 11:30-65.
[1d] responding to a user selection by inserting a second information into the document,	When a completion suggestion is displayed, if the user presses an acceptance key, such as the "tab" key, the suggestion entry (second information) is inserted into the document. *See, e.g.*, 7:4-5; 5:7-10 ("The word completion utility may then receive a command indicating acceptance of the completion entry. In response, the word completion utility replaces the partial data entry with the completion entry in the data file."). For example, in Fig. 2B the user enters "Mic"; acceptance of the completion suggestion causes the full name and address of Microsoft Corporation, as seen in Fig. 3, to be inserted into the document. *See, e.g.*, 11:36-50.

[1e] the second information associated with the first information from a second application program.	The completion information such as the address (second information) is associated with the name information (first information) used to locate and retrieve the suggestion entry from the database. *See* claim 1d.

2. The method of claim 1 wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device.	The user selects the suggestion entry by hitting a data acceptance keyboard button, such as the "tab" key. *See, e.g.*, 11:48-50 ("The user may then accept the completion suggestion by entering a familiar data acceptance keystroke, such as the 'tab' key or the 'enter' key.").

[3a] 3. The method of claim 1, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 1.
[3b] initializing the second application program;	The auto-complete program must necessarily be initialized in order to run.
[3c] searching, using the second application program, for the second information associated with the first information; and	The auto-complete program searches using a suggestion list database (second application program) for completion suggestions associated with a name entry. *See, e.g.*, 10:38-42 ("As discussed in more detail with reference to FIG. 3 below, the word completion suggestion 206 is identified by comparing the partial data entry 204 to the name entries in a suggestion list that includes a group of name-completion pairs."); 7:18-61 (" … For example, an e-mail address book may be used as the suggestion list when a user is typing within a structured address frame of an e-mail user interface. …"); 4:60-5:6; 11:30-65.
[3d] retrieving the second information.	The suggestion must be retrieved to be displayed for the user and inserted into the document. *See* claims 1d and 3c.

4. The method of claim 3, wherein when the second application program includes second information associated with the first information, performing the further step of displaying the second information.	The auto-complete program searches the suggestion list database for suggested completions (second information) associated with the partial data entry (first information) and displays the suggestions for the user. *See* claims 1c-1d and 3d.

5. The method of claim 4, further comprising the step of completing at least one of the first and second information in the document.	When the user accepts a suggested entry, the name data entry (first information) is completed with the suggested entry (second information). *See* claim 1d.

6. The method of claim 1, wherein the first information comprises a name.	The partial data entry (first information) can be a name. For example, the company name "Microsoft Corporation" in Figs. 2B and 3. *See also* claim 1d.

[36a] 36. A method for information handling within a document operated on by a first application program, the document containing first information that can be utilized in a second application program, the method comprising the steps of:	Hachamovitch discloses information handling within a document operated on by a first application program. *See* claim 1a. The document contains first information that can be utilized in a second application program. *See* claims 1b-c.
[36b] identifying without user intervention or designation the first information; and	*See* claim 1c.
[36c] responding to a user selection by inserting a second information into the document,	*See* claim 1d.
[36d] the second information	*See* claim 1e.

associated with the first information from a second application program.	

37. The method of claim 36, wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device.	*See* claim 2.

[38a] 38. The method of claim 36, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 3a.
[38b] initializing the second application program;	*See* claim 3b.
[38c] searching, using the second application program, for the second information associated with the first information; and	*See* claim 3c.
[38d] retrieving the second information.	*See* claim 3d.

39. The method of claim 38 wherein the step of inserting the second information into the document further comprises adding the second information to the first information in the document.	When the user accepts a completion suggestion, the completion information of an address (second information) can complete a name entry (first information)—that is, adding the suggestion entry to the name entry. *See* claim 1d.

40. The method of claim 38, wherein when the second	*See* claim 4.

application program includes second information associated with the first information, performing the further step of displaying the second information.	

41. The method of claim 38, further comprising the step of completing at least one of the first and second information in the document.	*See* claim 5.

42. The method of claim 36, wherein the first information comprises a name.	*See* claim 6.

[86a] 86. A method for assisting a computer operator to retrieve contact related information from a database when a document includes a name, the method comprising of the steps of:	Hachamovitch discloses a system that provides auto-complete suggestions for an entry in a document. For example, if a user enters a name, the system searches a database for competition suggestions, which can include contact related information. This is shown, for example, in Fig. 3, where the name "Microsoft Corporation" results in a suggested completion of the address for Microsoft Corporation. *See also* claims 1d and 3c.
[86b] (1) using a first computer program to analyze the document, without direction from the operator, to identify the name,	The auto-complete program includes a first computer program that, without direction from the operator, analyzes the document to identify a partial entry, such as a name. *See* claim 1c.
[86c] (2) using the identified name and a second computer program to search the database and to locate contact related information associated with the name, and	Using the partial entry identified (*e.g.*, a name), the auto-complete program searches using a suggestion list database (second computer program) to locate suggested completions, including contact related information, associated with the partial entry. *See* claims 1d and 3c.
[86d] (3) inserting the contact	If the user accepts the suggested completion by

related information into the document,	hitting an acceptance key, the suggested entry is inserted into the document. *See* claim 1d.
[86e] wherein steps (1)-(3) require only a single execute command.	Analysis of the document and searching the database are done automatically as the user enters information into the document, thus steps (1)-(3) require only execution of the suggestion acceptance command. *See* claims 86b-86d.

87. The method of claim 86 wherein the contact related information comprises an address.	In Fig. 3 the contact related information is the address for Microsoft Corporation.

89. The method of claim 86 wherein the name comprises a business name.	In Figs. 2B and 3 the name is a business name (Microsoft Corporation).

[93a] 93. A method for assisting a computer operator to retrieve information from a database that is related to text in a document, the method comprising the steps of:	*See* claim 86a.
[93b] (1) using a first computer program to analyze the document, without direction from the operator, to identify text in the document that can be used to search for related information,	*See* claim 86b.
[93c] (2) using a second computer program and the text identified in step (1) to search the database and to locate related information, and	*See* claim 86c.
[93d] (3) inserting the information located in step (2) into the document.	*See* claim 86d.

2. Computer Readable Medium And System Claims

Computer readable medium claims 7-12, 43-49, 97 and 98 are anticipated by Hachamovitch. These claims correspond to method claims 1-6, 36-42, 86, and 93. Hachamovitch discloses 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.*, 4:53-55).

System claims 13-18, 50-56, 100, and 101, which include means-plus-function limitations, are also anticipated by Hachamovitch. These claims correspond to method claims 1-6, 36-42, 86, and 93. Hachamovitch discloses the functions of the means-plus-function limitations (as set forth above with respect to the corresponding method claims). Hachamovitch discloses a processor (*see, e.g.*, Fig. 1 at 21) programmed to perform these functions, and the programmed processor is same or equivalent structure as that disclosed in the '854 patent (if any structure is disclosed at all).

C. Ground 6: Obviousness In View Of Hachamovitch

Claims 3, 9, 15, 38, 45 and 53 and any respective dependent claims recite initializing the second application program and searching using the second application program for the second information. These steps would have been obvious in view of Hachamovitch. (Menascé Decl. ¶ 161.) As a matter of common sense, it would have been obvious for the auto-complete program to be initialized in order to run and search for completed suggestions. (*Id.* ¶ 162.)

Claims 88, 90, and 91 would have also been obvious in view of Hachamovitch. (Menascé Decl. ¶¶ 163-165.) Claim 88 depends from claim 86 and recites that the contact related information inserted into the document is a telephone number. As discussed in Ground 5, Hachamovitch discloses auto-completion by inserting an address. (Fig. 3.) Because both addresses and phone numbers are common contact information, it would have been obvious to one of ordinary skill in the art to insert a telephone number. (*Id.* ¶ 163.) Similarly, claim 90 recites that the name identified in the document is a personal name. Hachamovitch discloses identifying a business name, as shown in Figs. 2B and 3. One of ordinary skill in the art would have immediately understood that there is no meaningful difference between a business name and a personal name, and thus it would have been obvious to identify a personal name. (*Id.* ¶ 164.)

Claim 91 recites that "the execute command is a selection from a menu." The suggestion acceptance command in Hachamovitch is executed by pressing a keyboard button (11:48-50), but selection from a menu was well known, and thus it would have been obvious to a person of ordinary skill in the art to select the suggestion acceptance command from a menu. (Menascé Decl. ¶ 165.) This would have been a simple substitution of one known element (selecting via a button) with another known element (selecting via a menu) to obtain predictable results. (*Id.*)

IX. GROUNDS BASED ON 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 '854 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 created by a notepad application. (2:19-22; 6:24-59.) When the user handwrites certain information, such as a name, it is automatically recognized and converted to formal font, as shown by "Isaac" in Fig. 2 below. (3:8-10; 10:10-21; 11:43-45.)

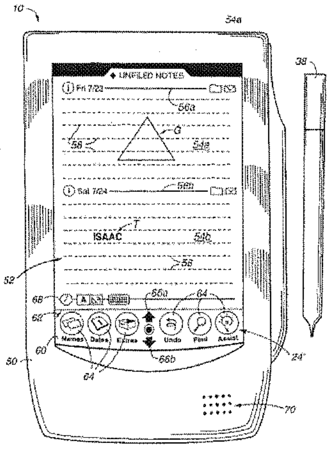


Figure 2

Luciw then presents for user selection a list of persons with the name identified; when the user makes a selection, information associated with the person, such as the person's full name, is inserted into the document. (11:60-12:6.)

B. Ground 7: Anticipation Based On Luciw

1. Method Claims

Method claims 1-6, 36-42, 86-88, 90, and 92-94 are anticipated by Luciw as set forth below.

Claim	Luciw
[1a] 1. A method for information handling within a document created using a first application program comprising the steps of:	Luciw discloses providing user assistance based on information the user enters into a document created by a first application program. *See, e.g.*, 2:19-22. Note areas 54a and 54b are documents created by the notepad application (first application 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.
[1b] entering a first information in the first application program;	The user enters first information, such as a name, in the notepad application. *See, e.g.*, 6:28-31 ("Additional text, graphical, and other data can then be entered into this second note area 54b. For example, the text object T comprising 'ISAAC' has been entered into second note area 54b."); Figs. 2 and 4b.
[1c] marking without user intervention the first information to alert the user	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.

that the first information can be utilized in a second application program; and	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."). As discussed above, once a user enters a first name, the system without user intervention recognizes the name and displays it as a formal font (*i.e.*, marks first information) to alert the user the name can be used for an implicit assist action—for example, to locate additional information in a database (*i.e.*, can be utilized in a second application program). *See, e.g.*, Fig. 2 (showing Isaac in formal font); Figs. 4b-4c, 6b, and 10a-10b; 10:6-20; 16:25-50; 17:1-10. Also, Luciw discloses presenting three "Isaacs" for selection by the user. 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."); Fig. 6b.
[1d] responding to a user selection by inserting a second information into the document,	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. *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.").

[1e] the second information associated with the first information from a second application program.	The second information (*e.g.*, a person's full name) is associated with the first information (*e.g.*, a person's first name). *See* claim 1d.

2. The method of claim 1 wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device.	Luciw discloses user selection via activation of a menu. *See, e.g.*, 3:14-20 ("FIGS. 6a-6c show respective assist windows in successive stages of an assist process, including first a window containing a first informational level directed at the name ISAAC alone, a second window with a pop-up menu offering a user choice among several known ISAACs, and a third window showing the selection of a particular ISAAC, that is ISAAC ASIMOV, having been accomplished.").

[3a] 3. The method of claim 1, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 1.
[3b] initializing the second application program;	The system in Luciw uses a second application program, which must necessarily be initialized in order to function. *See* claim 1c.
[3c] searching, using the second application program, for the second information associated with the first information; and	The system in Luciw searches, using a database (the second application program), for other information (second information) associated with a first name (first information). *See, e.g.* 10:49-11:39; 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."); 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. 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.") (emphasis added); Figs. 3 and 5.
[3d] retrieving the second information.	The second information is retrieved and displayed. *See* claim 3c.

4. The method of claim 3, wherein when the second application program includes second information associated with the first information, performing the further step of displaying the second information.	Luciw searches a database (second application) for and displays the second information (*e.g.*, inserting the full name). *See* claim 1d.

5. The method of claim 4, further comprising the step of completing at least one of the first and second information in the document.	The first and second information is completed by inserting the full name associated with the first name identified. *See* claim 1d.

6. The method of claim 1, wherein the first information comprises a name.	First information comprises a name. *See* claim 1b-d.

[36a] 36. A method for information handling within a document operated on by a first application program, the document containing first information that can be utilized in a second application program, the	Luciw discloses a method for information handling within a document operated on by a first application program. *See* claim 1a. The document contains first information that can be utilized in a second application program. *See* claims 1b-c.

method comprising the steps of:	
[36b] identifying without user intervention or designation the first information; and	Luciw identifies information that can be used for an implicit assist without user intervention. *See* claim 1c.
[36c] responding to a user selection by inserting a second information into the document,	*See* claim 1d.
[36d] the second information associated with the first information from a second application program.	*See* claim 1e.

37. The method of claim 36, wherein the user selection further comprises an activation of a device selected from a group consisting of a touch screen, a keyboard button, a screen button, an icon, a menu, and a voice command device.	*See* claim 2.

[38a] 38. The method of claim 36, wherein the step of inserting the second information into the document further comprises the steps of:	*See* claim 3a.
[38b] initializing the second application program;	*See* claim 3b.
[38c] searching, using the second application program, for the second information associated with the first information; and	*See* claim 3c.
[38d] retrieving the second information.	*See* claim 3d.

39. The method of claim 38 wherein the step of inserting the second information into the document further comprises adding the second information to the first information in the document.	The full name of the identified person (second information) is added to the identified first name (first information). *See* claim 1d.

40. The method of claim 38, wherein when the second application program includes second information associated with the first information, performing the further step of displaying the second information.	*See* claim 4.

41. The method of claim 38, further comprising the step of completing at least one of the first and second information in the document.	*See* claim 5.

42. The method of claim 36, wherein the first information comprises a name.	*See* claim 6.

[86a] 86. A method for assisting a computer operator to retrieve contact related information from a database when a document includes a name, the method comprising of the steps of:	Luciw discloses a method for assisting a user to retrieve contact information from a database related to a name included in a document. *See* claim 1.
[86b] (1) using a first computer program to analyze the document, without direction from the operator, to identify the name,	A user assist program (first computer program) analyzes the document without direction from the user to identify information that can be used for an assist, including a name. *See* claim 1c.

[86c] (2) using the identified name and a second computer program to search the database and to locate contact related information associated with the name, and	The identified name is used to search a database (second application program) to locate contact related information associated with the name, such as a phone number. *See* claim 3c.
[86d] (3) inserting the contact related information into the document,	The phone number is inserted into the document. *See* claims 1d and 3c.
[86e] wherein steps (1)-(3) require only a single execute command.	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 1d and 3c. Thus, the system identifies the name, searches the database, and inserts the contact information upon execution of only the explicit assist command.

87. The method of claim 86 wherein the contact related information comprises an address.	Each person entry in the database contains various contact related information, including an address. *See, e.g.*, Fig. 5; 3:11-13 ("FIG. 5 shows an example of a generic <PERSON> type frame along with a particular set of specific frames of the <PERSON> type."); 10:49-11:39.

88. The method of claim 86 wherein the contact related information comprises a	The contact related information can be a phone number. *See, e.g.*, Fig. 5. *See also* claims 86c and 87.

telephone number.	

90. The method of claim 86 wherein the name comprises a personal name.	The name comprises a personal name. *See* claim 1c.

92. The method according to claim 91 wherein the operator enters the execute command before step (2).	The user enters the explicit assist command prior to identification of the name and searching the database. *See* claim 86e.

[93a] 93. A method for assisting a computer operator to retrieve information from a database that is related to text in a document, the method comprising the steps of:	*See* claim 86a.
[93b] (1) using a first computer program to analyze the document, without direction from the operator, to identify text in the document that can be used to search for related information,	*See* claim 86b.
[93c] (2) using a second computer program and the text identified in step (1) to search the database and to locate related information, and	*See* claim 86c.
[93d] (3) inserting the information located in step (2) into the document.	*See* claim 86d.

94. The method according to claim 93 wherein at least steps (2)-(3) take place following entry a single execute command.	*See* claim 86e.

2. Computer Readable Medium And System Claims

Computer readable medium claims 7-12, 43-49, 97, and 98 are anticipated by Luciw. These claims correspond to method claims 1-6, 36-42, 86, and 93. Luciw discloses 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).

System claims 13-18, 50-56, 100, and 101, which include means-plus-function limitations, are also anticipated by Luciw. These claims correspond to method claims 1-6, 36-42, 86, and 93. Luciw discloses the functions of the means-plus-function limitations (as set forth above with respect to the corresponding method claims). Luciw discloses a processor (*see*, *e.g.*, Fig. 1 at 12) programmed to perform these functions, and the programmed processor is same or equivalent structure as that disclosed in the '854 patent (if any structure is disclosed at all).

C. Ground 8: Obviousness In View Of Luciw

Furthermore, claims 3, 9, 15, 38, 45 and 53 and any respective dependent claims recite initializing the second application program and searching using the second application program for the second information. These steps would have been obvious in view of Luciw. (Menascé Decl. ¶ 174.) As a matter of common sense, it would have been obvious for the database to be initialized in order to run and search for the name, so as to provide the user with assistance. (*Id.* ¶ 175.)

Claims 87, 89, 91, and 95 would have been obvious in view of Luciw. (Menascé Decl. ¶ 176.) Claim 87 depends from claim 86 and requires the contact related information comprise an address. As discussed in Ground 7, Luciw discloses inserting contact related information such as a full name. It would have been obvious to insert an address given that Fig. 5 of Luciw discloses storing address information for contacts. This would be a simple substitution of address for name based on known methods to yield a predictable result. (*Id.*)

Claim 89 depends from claim 86 and recites that the name identified in the document is a business name. As discussed in Ground 7, Luciw discloses identifying a personal name. (Figs. 4b-4c; 11:43-45.) One of ordinary skill in the art would have immediately understood that there is no meaningful difference between a personal name and a business name, and thus it would have been obvious to identify a business name. (Menascé Decl. ¶ 177.) Claims 91 and 95 both recite that "the execute command is a selection from a menu." The "explicit assist" command in Luciw is executed by selection of an on-screen button. (Fig. 2 at 24; 8:51-53.) Because other commands in Luciw are selected from a menu (3:14-20), it would have been obvious to a person of ordinary skill in the art to select the "explicit assist" command from a menu. (Menascé Decl. ¶ 178.) This would have been a simple substitution of one known element (selecting via a button) with another known element (selecting via a menu) to obtain predictable results. (*Id.*)

X. CONCLUSION

For the reasons detailed above, there is a reasonable likelihood that Petitioner will prevail as to each of claims 1-18, 36-56, 86-95, 97, 98, 100, and 101 of the '854 patent. Accordingly, *inter partes* review of claims 1-18, 36-56, 86-95, 97, 98, 100, and 101 of the '854 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**.

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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. 7,496,854 (*i.e.*, Sunstein Kann Murphy & Timbers LLP, 125 Summer Street, Boston, MA 02110-1618).

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