

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 60793WO003	FOR FURTHER ACTION		See item 4 below
International application No. PCT/US2007/002962	International filing date (<i>day/month/year</i>) 01 February 2007 (01.02.2007)	Priority date (<i>day/month/year</i>) 10 February 2006 (10.02.2006)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant 3M INNOVATIVE PROPERTIES COMPANY			

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input checked="" type="checkbox"/>	Box No. II	Priority	<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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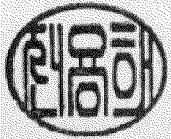
From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To: BUCKINGHAM, Stephen W. 3M Center Office of Intellectual Property Counsel Post Office Box 33427 Saint Paul Minnesota 55133-3427 USA		Date of mailing (day/month/year) 06 JULY 2007 (06.07.2007)	
Applicant's or agent's file reference 60793WO003		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/US2007/002962	International filing date (day/month/year) 01 FEBRUARY 2007 (01.02.2007)	Priority date(day/month/year) 10 FEBRUARY 2006 (10.02.2006)	
International Patent Classification (IPC) or both national classification and IPC <i>H04L 12/28(2006.01)i, H04B 7/26(2006.01)i, G06Q 30/00(2006.01)i</i>			
Applicant 3M INNOVATIVE PROPERTIES COMPANY			
1. This opinion contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input checked="" type="checkbox"/> Box No. II Priority <input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application 2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 3. For further details, see notes to Form PCT/ISA/220.			

Name and mailing address of the ISA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Date of completion of this opinion 06 JULY 2007 (06.07.2007)	Authorized officer JEON, Yong Hai Telephone No. 82-42-481-5657	
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Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of :
 - the international application in the language in which it was filed
 - a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
2. This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material
 - on paper
 - in electronic form
 - c. time of filing/furnishing
 - contained in the international application as filed.
 - filed together with the international application in electronic form.
 - furnished subsequently to this Authority for the purposes of search.
4. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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Box No. II Priority

1. The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date(Rules 43bis.1 and 64.1) is the claimed priority date.

2. This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

the entire international application

claims Nos. 1-32 _____

because:

the said international application, or the said claims Nos. 1-32 _____
relate to the following subject matter which does not require an international search (*specify*):

Although claims 1-32 are directed to schemes, rules or method of doing business, the written opinion of the international searching authority has been carried out.

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed (*specify*):

no international search report has been established for said claims Nos. _____

a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13ter.1(a) or (b).

a meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Searching Authority in a form and manner acceptable to it.

the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

See Supplemental Box for further details.

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-32</u>	YES
	Claims	<u>None</u>	NO
Inventive step (IS)	Claims	<u>1-32</u>	YES
	Claims	<u>None</u>	NO
Industrial applicability (IA)	Claims	<u>1-32</u>	YES
	Claims	<u>None</u>	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: WO 2005/036437 A1 (3M INNOVATIVE PROPERTIES COMPANY) 21 Apr. 2005

D2: US 5321848 A (MIYAHIRA et al.) 14 Jun. 1994

Claim 1 of the present invention relates to an order taking system for a quick service restaurant enabling a customer to place an order for an item from a drive-through lane, said quick service restaurant having a plurality of staff persons for completing said order. The system comprises: a drive-through order point located near said drive-through lane, said drive-through order point being capable of receiving said order for said item from said customer; a base station; a plurality of wearable headsets adapted to be used by said plurality of staff persons; a first wireless voice communication link between said order placing equipment and said base station; and a second wireless voice communication link between said base station and said plurality of headsets; at least one of plurality of staff persons being able to communicate by voice with said customer at said drive-through lane using said first wireless voice communication link and said second wireless voice communication link.

Claim 8 of the present invention relates to an order taking system for a quick service restaurant enabling a customer to place an order for an item from a drive-through lane, said quick service restaurant having a plurality of staff persons for completing said order. The system comprises: a drive-through order point positioned in the proximity of said drive-through lane; a base station; a plurality of wearable headsets adapted to be used by said plurality of staff persons; a first wireless voice communication link between said drive-through order point and said base station; and a second wireless voice communication link between said base station and said plurality of headsets; at least one of plurality of staff persons being able to communicate by voice with said customer at said drive-through lane using said first wireless voice communication link and said second wireless voice communication link; and a third wireless voice communication link between said drive-through order point and at least one of said plurality of headsets allowing said drive-through order point to function as a repeater in voice communications between said base station and at least one of said plurality of staff persons.

Claim 17 of the present invention relates to a method of taking orders associated with a quick service restaurant enabling a customer to place an order for an item from a drive-through lane, said quick service restaurant having a plurality of staff persons for completing said order. The method comprises the steps of: communicating on a first wireless voice communication link from a drive-through order point capable of receiving said order for said item from said customer to a base station; communicating on a second wireless voice communication link from said base station to at least one of a plurality of wearable headsets adapted to be used by said plurality of staff persons; whereby at least one of said plurality of staff persons are able to communicate by voice with said customer at said drive-through lane using said first wireless voice communication link said wireless voice communication link.

Claim 24 of the present invention relates to a method of taking orders associated with a quick service restaurant enabling a customer to place an order for an item from a drive-through lane, said quick service restaurant having a plurality of staff persons for completing said order. The method comprises the steps of: communicating on a first wireless voice communication link from a drive-through order point capable of receiving said order for said item from said customer to a base station; communicating on a second wireless voice communication link from said base station to at least one of a plurality of wearable headsets adapted to be used by said plurality of staff persons; whereby at least one of said plurality of staff persons are able to communicate by voice with said customer at said drive-through lane using said first wireless voice communication link said wireless voice communication link; and communicating on a third wireless voice communication link between said drive-through order point and at least one of said plurality of headsets allowing said drive-through order point to function as a repeater in voice communications between said base station and at least one of said plurality of staff persons

(continued on the supplemental box)

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of :

(Box No. V item 2)

D1 discloses a system for communicating a plurality of food orders in a restaurant. The system comprises: a plurality of portable ordering devices, each of said plurality of portable ordering devices being capable of wireless communication and being capable of receiving handwritten indicative of one of said plurality of food orders; a communication processor wirelessly coupled with said plurality of portable ordering devices; a display, operatively coupled to said communication processor, for displaying in a food preparation area; and said communication processor wirelessly receiving said handwritten indicia uniquely identified with said one of said plurality of portable ordering devices and displaying said handwritten indicia on said display.

D2 discloses a drive-up station full duplex communication system for communications between an employee within a building and a customer seated within a vehicle in a drive-up lane at a drive-up customer speaker post, outside of the building. The system comprises: employee transceiving means for transmitting a first audio signal and for receiving a second audio signal; a base station transceiving means to receive said first audio signal and a third audio signal and to transmit said second audio signal and a fourth audio signal; audio gain reduction means to decrease said second audio signal; fixed remote communication means mounted to the drive-up customer speaker post to transmit said third audio signal and receive said fourth audio signal said fixed remote communication means including a microphone compartment having a microphone disposed therein for enabling the customer to communicate to the employee within the building, a speaker compartment having a speaker disposed therein for enabling the customer to receive communications from the employee within the building, and isolation means to separate acoustically said microphone compartment and said speaker compartment; said speaker compartment having a front opening for helping to direct sounds from the speaker towards the customer; said isolation means including a front wall having a baffle mounted thereto extending downwardly to partially obstructed said frontal opening for helping to direct sounds from the speaker downwardly and away from the microphone; said speaker compartment having a bottom wall recessed from said frontal opening for enabling sounds from the speaker to be directed downwardly towards the drive-up lane; means for mounting said speaker inclined downwardly at an angle θ relative to the vertical for directing sounds from the speaker downwardly towards the drive-up lane; and electrically connective means to connect said fixed remote communication means to said base station transceiving means.

However, D1 and D2 do not disclose the technical feature of claims 1, 8, 17 and 24 that plurality of staff persons are able to communicate by voice with customers at a drive-through lane using a first wireless voice communication link and a second voice communication link.

And the said technical feature is not anticipated by the prior art and not obvious to a person skilled in the art.

Thus claims 1, 8, 17 and 24 involve novelty and an inventive step under the criteria of PCT Article 33(2) and (3).

Also, claims 2-7, 9-16, 18-23 and 25-32 comply with PCT Article 33(2) and (3) as they are dependent claims.

Claims 1-32 of the present invention relate to order taking systems using wireless intercom systems for commercial establishments. Therefore, the claims 1-32 are industrially applicable under the criteria PCT Article 33(4).