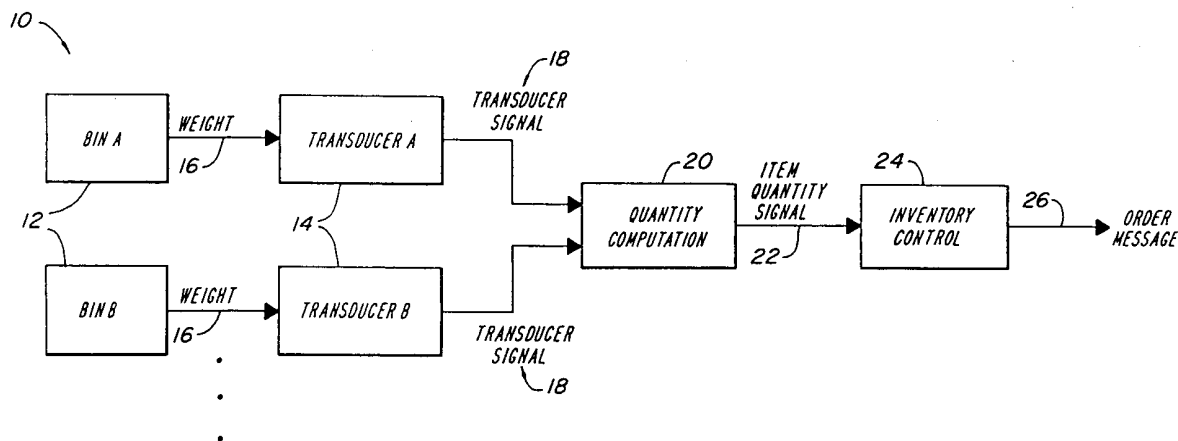




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁷ : G06F 17/60</p>	<p>A3</p>	<p>(11) International Publication Number: WO 00/29925</p> <p>(43) International Publication Date: 25 May 2000 (25.05.00)</p>
<p>(21) International Application Number: PCT/US99/27336</p> <p>(22) International Filing Date: 18 November 1999 (18.11.99)</p> <p>(30) Priority Data: 60/108,843 18 November 1998 (18.11.98) US 60/136,297 27 May 1999 (27.05.99) US</p> <p>(71) Applicant: BINTEL SYSTEMS, INC. [US/US]; 175 Lowell Street, Arlington, MA 02474 (US).</p> <p>(72) Inventors: HILL, Gordon, W.; 175 Lowell Street, Arlington, MA 02474 (US). LLOYD, John, D.; 45 Andrew Avenue, Hull, MA 02045 (US). HILL, Lawrence, W.; 163 Waverly Street, Arlington, MA 02174 (US). BESEN, Matthew, M.; 9 Forbes Lane, Andover, MA 01810 (US).</p> <p>(74) Agents: SCHURGIN, Stanley, M. et al.; Weingarten, Schurgin, Gagnebin & Hayes LLP, Ten Post Office Square, Boston, MA 02109 (US).</p>		<p>(81) Designated States: CA, CN, IL, JP, MX, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> <p>Published <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 23 November 2000 (23.11.00)</p>

(54) Title: INVENTORY CONTROL AND COMMUNICATION SYSTEM



(57) Abstract

An inventory control (24) and communication system provides automated real-time polling of stock levels and ordering to allow stock levels to be maintained. A bin (12) is established for each stock item. Transducers (14) are associated with each storage unit to produce a signal (18) indicative of the weight of the stock items. The signals are transmitted at regular intervals to a central inventory server, which maintains information about transducer location and the corresponding stock item. Inventory logic in the central inventory server computes the quantity of each stock item from the transducer signals and the weight of the stock items. Inventory logic also includes threshold values for the minimum and maximum quantity of each stock item. When the quantity of a stock item reaches a minimum threshold, inventory logic sends an order to the supplier to restore the stock item to the maximum quantity threshold.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/27336

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(7) :G06F 17/60 US CL :705/22, 23 According to International Patent Classification (IPC) or to both national classification and IPC</p>																				
<p>B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 705/22, 23, 16, 21, 28, 29 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Please See Extra Sheet. Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Extra Sheet.</p>																				
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y,E</td> <td>US 6,012,041 A (BREWER et al.) 04 January 2000, the background and the summary of the invention, col.4 lines 15-21, col.5 lines 13-17, col.5 line 65 to col.6 line 4, col.8 lines 3-9.</td> <td>1-54</td> </tr> <tr> <td>Y,P</td> <td>US 5,963,919 A (BRINKLEY et al.) 05 October 1999, the background and the summary of the invention, col.4 line 49 to col.5 line 8, col.9 lines 1-9.</td> <td>1-54</td> </tr> <tr> <td>Y,P</td> <td>US 5,953,707 A (HUANG et al.) 14 September 1999, the background and the summary of the invention, Figs.1-3, 46.</td> <td>1-54</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y,E	US 6,012,041 A (BREWER et al.) 04 January 2000, the background and the summary of the invention, col.4 lines 15-21, col.5 lines 13-17, col.5 line 65 to col.6 line 4, col.8 lines 3-9.	1-54	Y,P	US 5,963,919 A (BRINKLEY et al.) 05 October 1999, the background and the summary of the invention, col.4 line 49 to col.5 line 8, col.9 lines 1-9.	1-54	Y,P	US 5,953,707 A (HUANG et al.) 14 September 1999, the background and the summary of the invention, Figs.1-3, 46.	1-54						
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<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.</p>																				
<table border="0"> <tr> <td>* Special categories of cited documents:</td> <td>*T*</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>*A* document defining the general state of the art which is not considered to be of particular relevance</td> <td>*X*</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>*E* earlier document published on or after the international filing date</td> <td>*Y*</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>* & *</td> <td>document member of the same patent family</td> </tr> <tr> <td>*O* document referring to an oral disclosure, use, exhibition or other means</td> <td></td> <td></td> </tr> <tr> <td>*P* document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table>			* Special categories of cited documents:	*T*	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	*A* document defining the general state of the art which is not considered to be of particular relevance	*X*	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	*E* earlier document published on or after the international filing date	*Y*	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	* & *	document member of the same patent family	*O* document referring to an oral disclosure, use, exhibition or other means			*P* document published prior to the international filing date but later than the priority date claimed		
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Date of the actual completion of the international search 08 AUGUST 2000		Date of mailing of the international search report 28 AUG 2000																		
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230		Authorized officer CUONG H. NGUYEN <i>Ruqenia Zogan</i> Telephone No. (703) 305-4553																		

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/27336

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,362,197 A (RIGLING) 08 November 1994, the background and the summary of the invention, col.1 lines 1-30, col.2 lines 29-37, col.8 lines 23-41.	1-54
A	US 5,311,438 A (SELLERS et al.) 10 May 1994, the background and the summary of the invention.	1-54
A	US 5,226,782 A (RIGLING) 13 July 1993, the background and the summary of the invention, col.2 lines 25-35, col.7 line 58 to col.8 line 43.	1-54

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B. FIELDS SEARCHED

Documentation other than minimum documentation that are included in the fields searched:

Microsoft Press Computer Dictionary, 3rd edition.
Considine, Van Nostrand's Scientific Encyclopedia, 6th edition.
Harcourt: AP dictionary of science and technology.
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