(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 5 June 2003 (05.06.2003)

PCT

(10) International Publication Number WO 03/046681 A3

G06F 17/60 (51) International Patent Classification⁷:

(21) International Application Number: PCT/SG02/00278

(22) International Filing Date:

28 November 2002 (28.11.2002)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2001100598

28 November 2001 (28.11.2001) ΑU

- (71) Applicant and
- (72) Inventor: YAP, Chin Kok [SG/SG]; c/o YCH Group, 30 Tuas Road, YCH DistriPark, Singapore 638492 (SG).
- (74) Agent: SIM, Yuan Meng, Andrew; c/o SHOOK LIN & BOK, 1 Robinson Road, #18-00, AIA Tower, Singapore 048542 (SG).

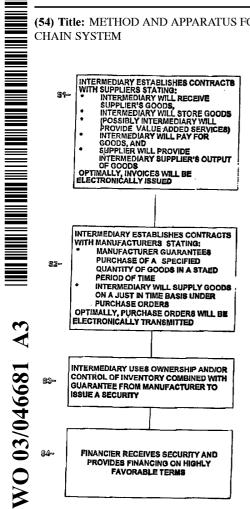
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

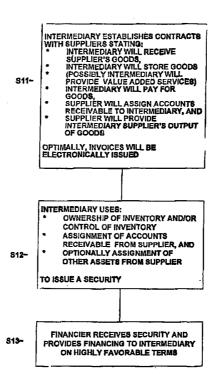
Published:

with international search report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR MANAGEMENT, FINANCING AND SUPPLY IN AN INTEGRATED SUPPLY CHAIN SYSTEM





(57) Abstract: A method and apparatus for providing trade financing to inventory suppliers manufacturers (230),or both, on the basis of a zero inventory model. The method and apparatus involves generation of a security on the basis of inventory ownership combined with either or both of a purchase guarantee from an inventory purchaser and an assignment of accounts receivable by an inventory supplier (210). The invention also involves an integrated supply chain process (S1-S4-S11-S13) and notification interface (30) that can perform financial transactions and electronic proof of delivery in support of such zero inventory model financing.

WO 03/046681 A3

WO 03/046681 A3



(88) Date of publication of the international search report:

18 December 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

International application No.

PCT/SG02/00278

Α.	CLASSIFICATION OF SUBJECT MATTER						
Int. Cl. 7:	G06F 17/60						
According to	International Patent Classification (IPC) or to both r	national classification and IPC					
В.	FIELDS SEARCHED						
Minimum docu	mentation searched (classification system followed by cla	ssification symbols)					
Documentation	searched other than minimum documentation to the exter	nt that such documents are included in	the fields searched				
Electronic data WPAT:	base consulted during the international search (name of d Keywords - SUPPLY CHAIN, PURCHASE G TIME, OWNERSHIP						
C.	DOCUMENTS CONSIDERED TO BE RELEVANT						
Category*	Citation of document, with indication, where appr	opriate, of the relevant passages	Relevant to claim No.				
X Y	US 6167385 A (HARTLEY-URQUHART) 2 Entire document Entire document		1, 11, 17, 21, 27, 37 2-10, 12-16, 18-20, 22-26, 28-36, 38-40				
X Y	WO 01/52158 A (ISUPPLY CORPORATION Entire document Entire document US 5732400 A (MANDLER et al.) 24 Marci		1, 11, 17, 21, 27, 37 2-10, 12-16, 18-20, 22-26, 28-36, 38-40				
X Y	Entire document Entire document		1, 11, 17, 21, 27, 37 2-10, 12-16, 18-20, 22-26, 28-36, 38-40				
X F	further documents are listed in the continuation	of Box C X See paten	t family annex				
"A" docume which i relevan "E" earlier after the "L" docume claim(s publica reason	is not considered to be of particular an oce or application or patent but published on or e international filing date count which may throw doubts on priority "Y" do or which is cited to establish the tition date of another citation or other special (as specified)	er document published after the internal d not in conflict with the application but theory underlying the invention cument of particular relevance; the clainsidered novel or cannot be considered nen the document is taken alone cument of particular relevance; the clainsidered to involve an inventive step with one or more other such documents, sperson skilled in the art cument member of the same patent fam	med invention cannot be to involve an inventive step med invention cannot be med invention cannot be hen the document is combined such combination being obvious to				
exhibiti "P" docume	ion or other means ent published prior to the international filing t later than the priority date claimed		,				
	ual completion of the international search	Date of mailing of the international s	earch report 0 3 APR 2003				
	ing address of the ISA/AU	Authorized officer					
PO BOX 200, E-mail address	N PATENT OFFICE WODEN ACT 2606, AUSTRALIA : pct@ipaustralia.gov.au (02) 6285 3929	CHARLES BERKO Telephone No: (02) 6283 2169					

International application No.

PCT/SG02/00278

		C1/5G02/002/G		
C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	US 6157915 A (BHASKARAN et al.) 5 December 2000 Entire document	1-40		
	WO 00/42556 A (VOLVO COMMERCIAL FINANCE THE AMERICAS 20 July 2000)		
Y	Entire document	1-40		
Y	WO 00/77708 A (C#MINOR SOFTWARE INC.) 21 December 2000 Entire document	1-40		
Y	US 6041310 A (GREEN et al.) 21 March 2000 Entire document	1-40		

International application No.

PCT/SG02/00278

Box I	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This intereasons:	rnational search report has not been established in respect of certain claims under Article 17(2)(a) for the following
1.	X Claims Nos: 1-26
	because they relate to subject matter not required to be searched by this Authority, namely:
	They define a method of doing business which is excluded from searching under Rule 39.1(iii). This office has, however, chosen to search this subject matter in line with National Laws.
2.	Claims Nos :
	because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3.	Claims Nos: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule
	6.4(a)
Box II	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This Inte	rnational Searching Authority found multiple inventions in this international application, as follows:
This Inte	Claims 1-20, directed to a method of financing provision by at least one supplier of goods to at least one manufacturer through a supply chain intermediary, are characterised by the intermediary owning and controlling the goods <u>in</u> inventory, securing purchase guarantee from the manufacturer and finance from a financing entity based on the ownership and guaranteed security.
	Claims 1-20, directed to a method of financing provision by at least one supplier of goods to at least one manufacturer through a supply chain intermediary, are characterised by the intermediary owning and controlling the goods <u>in</u> inventory, securing purchase guarantee from the manufacturer and finance
	Claims 1-20, directed to a method of financing provision by at least one supplier of goods to at least one manufacturer through a supply chain intermediary, are characterised by the intermediary owning and controlling the goods <u>in</u> inventory, securing purchase guarantee from the manufacturer and finance from a financing entity based on the ownership and guaranteed security.
1.	Claims 1-20, directed to a method of financing provision by at least one supplier of goods to at least one manufacturer through a supply chain intermediary, are characterised by the intermediary owning and controlling the goods in inventory, securing purchase guarantee from the manufacturer and finance from a financing entity based on the ownership and guaranteed security. [Continued in Supplemental Box] As all required additional search fees were timely paid by the applicant, this international search report covers all
1. 1.	Claims 1-20, directed to a method of financing provision by at least one supplier of goods to at least one manufacturer through a supply chain intermediary, are characterised by the intermediary owning and controlling the goods in inventory, securing purchase guarantee from the manufacturer and finance from a financing entity based on the ownership and guaranteed security. [Continued in Supplemental Box] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite
1. 1. 2.	Claims 1-20, directed to a method of financing provision by at least one supplier of goods to at least one manufacturer through a supply chain intermediary, are characterised by the intermediary owning and controlling the goods in inventory, securing purchase guarantee from the manufacturer and finance from a financing entity based on the ownership and guaranteed security. [Continued in Supplemental Box] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. As only some of the required additional search fees were timely paid by the applicant, this international search
1. 1. 2. 3.	Claims 1-20, directed to a method of financing provision by at least one supplier of goods to at least one manufacturer through a supply chain intermediary, are characterised by the intermediary owning and controlling the goods in inventory, securing purchase guarantee from the manufacturer and finance from a financing entity based on the ownership and guaranteed security. [Continued in Supplemental Box] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.: No required additional search fees were timely paid by the applicant. Consequently, this international search report

International application No.

PCT/SG02/00278

Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: II

- 2. Claims 21-26, directed to a method of securitization involving a supply chain intermediary taking similar ownership, are similarly characterised, not by a manufacturer or financial entity, but does issue a financial instrument similarly based on the ownership and guaranteed security.
- 3. Claims 27-36, directed to a supply chain system to support a <u>zero</u> inventory model financing (at variance with claim 1 for example), are characterised by a supply chain management system controller coupled to a communication means operative to send and receive messages to and from remote financial institution and inventory units for example, with the inventory units disposable at an intermediary site.

Although these sets of claims do not contain matter constituting entirely separate "special technical features", they nevertheless only have the **financing of an inventory controller intermediary chain supplier** in **common**.

4. Claims 37-40 directed to a method of implementing proof of delivery process to an order for delivery of inventory in a supply chain involving at least an intermediary and one of an inventory supplier and purchaser, are characterised by directing movement of the inventory to and from an intermediary location/intermediary purchaser location and transmission of information regarding such movement.

All that this last set of claims has in common with the other sets is an inventory controller intermediary chain supplier. This merely constitutes a clearing house or third party in a business transaction and is considered to be well used, well known, common general knowledge, and is not new. The claims are therefore considered to lack unity a' posteriori.

Information on patent family members

International application No.

PCT/SG02/00278

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

	t Document Cited in Search Report			Pate	nt Family Member		
US	6167385	AU	62879/99	WO	200033220	.,	
wo	200152158	AU	200130936	EP	1254420	US	2002184084
		US	2002194043	US	2002194057	US	2002019761
US	5732400	AU	48547/96	EP	804772	wo	9621192
US	6157915	NONE					
wo	200042556	AU	200026114	EP	1145162		
WO	200077708	AU	200053336				
US	6041310	NONE					