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Examination of CII and Business Methods Applications, Exclusions from Patentability: Examples

Lisbon 20 March 2007



Outline

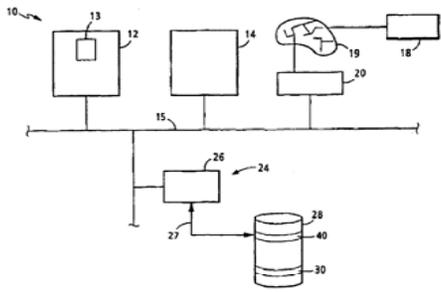
- Examples
 - common practice at EPO
- Case Law

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 17/60		A1	(11) International Publication Number: WO 99/54838
			(43) International Publication Date: 28 October 1999 (28.10.99)
(21) International Application Number: PCT/US99/08779		(74) Agent: MALONEY, Denis, G.; Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804 (US).	
(22) International Filing Date: 21 April 1999 (21.04.99)		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(30) Priority Data: 09/063,535 21 April 1998 (21.04.98) US			
(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 09/063,535 (CON) Filed on 21 April 1998 (21.04.98)			
(71) Applicant (for all designated States except US): THE NASDAQ STOCK MARKET, INC. [US/US]; 1735 K Street, N.W., Washington, DC 20006 (US).		Published With international search report.	
(72) Inventors; and (75) Inventors/Applicants (for US only): BLOOM, Steven, M. [US/US]; 512 Bloomfield Avenue, Caldwell, NJ 07006 (US). CANADA, Peter, T. [US/US]; 6045 Chesire Drive, Bethesda, MD 20814 (US). GOUWS, Fanie [US/US]; 4 Hillcrest Avenue, Chatham, NJ 07928 (US). HOLMES, Douglas, T. [US/US]; 59 Glen Street, Dover, MA 02030 (US).			
(54) Title: INDEX REBALANCING FOR A CAPITALIZATION WEIGHTED STOCK INDEX			
			
(57) Abstract			
<p>A computer system (10) including a processor (12) and a storage device storing a computer program product for rebalancing a capitalization weighted stock index are described. The computer program includes instructions for causing a computer to classify stocks in the index as Large Individual Stock if a stock has a capitalization weight above or equal to a first threshold or as a Small Individual Stock if the stock has a capitalization weight below the first threshold. The computer program causes the computer to scale down the Large Individual Stocks by an excess capitalization weight of the large stocks and distribute an aggregated excess capitalization weight of the Large Individual Stocks over the capitalization weights of the Small Individual Stocks. An iterative redistribution of excess capitalization over all Small Individual Stocks can be used to provided for less than proportional distribution of excess capitalization to very small capitalized stocks. The index rebalancing software (40) retains a capitalization weighting characteristic while permitting the index to conform to generally accepted accounting, economic and tax standards. Index rebalancing is accomplished while maintaining the original relative position of stocks and reducing the market impact of rebalancing on the Small Individual Stock group.</p>			

EP1080438 / WO9954838

Claim 1

A computer program product stored on a computer readable medium for rebalancing a capitalization weighted stock index comprises instructions for causing a computer to:

- *classify stocks in the index as a Large Individual Stock if a stock has a capitalization weight above or equal to a first threshold or as a Small Individual Stock if the stock has a capitalization weight below the first threshold;*
- *scale down the Large Individual Stocks by an excess capitalization weight of the large stocks;*
- *distribute an aggregated excess capitalization weight of the Large Individual Stocks over the capitalization weights of the Small Individual Stocks.*

Examination EP1080438 / WO9954838

- European Search Report:
 - Declaration of "No Search" under Rule 45 EPC
- Examination Procedure
 - First communication: 19.11.2001
 - Document WO97/22075 (family member of US5819238 (D1)) was mentioned but not used.
 - Objection to claims 1-15 under Art. 52(2) and (3) EPC for being a computer program as such. Further objections were made to claims 1-15 under Articles 52(1), 54(2) EPC, Novelty, and 56 EPC, Inventive Step.

Examination EP1080438 / WO9954838

- Examination Procedure
 - First communication: 19.11.2001
 - Objection to claims 16-28 under Art. 52(2) and (3) EPC for being a method of doing business as such.
 - Objection to claim 29 (computer system) under Art. 52(1), 54(2) and 56 because the technical features of this claim are present in every stored program computer.

Examination EP1080438 / WO9954838

- Reply: 21.05.2002
 - The category of claims 1-15 was changed from computer program to apparatus.
 - Furthermore it was argued that computer programs are allowable according to decisions of the Boards of Appeal (T1173/97, T935/97, T115/85, T362/90, T931/95). The claims were amended, with new claims 1-29 replacing the previous request.

Examination EP1080438 / WO9954838

- Third Party Observation:26.02.2003
 - An anonymous third party observation was received accompanied by an (open) letter dated 21.04.1993 and a poorly dated printout of a spreadsheet. The letter stated that from 1994 on, at the time of the annual reweighing of stocks in the AEX index, the maximum participation of a stock in the index will be limited to 10%. The spreadsheet showed that this was achieved by iteratively capping and redistributing the excess weighting.

Examination EP1080438 / WO9954838

- Second communication : Summons to Oral Proceedings
04.08.2003
 - The third party observations were introduced as document D2. The core of the invention, whether implemented on a computer or not, is still the method of rebalancing the weight in the index. This can be regarded as a mental act, a mathematical method, an algorithm, a business method or even a computer program, all of which are excluded from patentability (Art. 52(2) & (3) EPC).
 - Claim 1 would in any case not be inventive even if this were overcome because D2 discloses a similar cap on the participation in a stock index.
 - Also objections regarding Art. 123(2) EPC (extension beyond original disclosure)

Examination EP1080438 / WO9954838

- Reply to the Summons: 07.11.2003
 - The applicant argued that the invention was in fact an apparatus for monitoring or evaluating conditions in a system including physical parameters. Therefore the invention should not be excluded from patentability.
 - The date on the spreadsheet of D2 was disputed.
 - The actual scaling algorithm as well as many details are not disclosed in D2, therefore claim 1 should be considered novel and inventive.
 - Also Art. 123(2) EPC objections were overcome; Auxiliary requests presented

Examination EP1080438 / WO9954838

- Telephone conversation with the representative
20.11.2003
 - The representative was informed that the auxiliary requests were not admissible and why
 - *there was an unreasonable number of requests (about 24) ; no genuine attempt to overcome the Art. 52(2) and (3) objection.*

- Oral Proceedings: 09.12.2003
 - The representative did not attend.
 - Application **refused** under Article 97(1) *on the grounds of exclusion of patentability* as stated in Article 52(2) and 52(3) EPC.

Examination EP1080438 / WO9954838

- Grounds for refusal
 - *The subject-matter [claim 15] relates to a method executed on a computer for rebalancing a capitalisation-weighted stock index.*
 - *The method represents calculating and outputting an index value based on some business-related input data. Although, as expected, the use of a computer increases speed of execution, there is no additional technical effect.*
 - *The implementation of such a calculation on a computer is insufficient to lend technical character to the calculation or the business consideration on which it is based.*

Examination EP1080438 / WO9954838

- Grounds for refusal (cont.)
 - *Not even the inclusion of means for input and output of data, which means are accepted as implicit, can render the subject-matter of the claim sufficiently technical in character.*
 - *Mathematical, business method as such, which finds its sole application in the commercial or business field of stock indices. Thus the subject-matter of claim 15 is excluded from patentability (Art. 52(2)&(3) EPC).*
 - Claims in different category treated similarly.

Examination EP1080438 / WO9954838

- Grounds for refusal (cont.)

- Obiter Dicta

Were any of the independent claims not excluded from patentability, the subject-matter of these claims would not be inventive as none of the method steps or means for carrying out the method steps solves a technical problem. The way a stock index is calculated is an arbitrary business decision which cannot be considered technical. Hence the particular algorithm does not contribute to inventive step. The remaining technical features are basic arithmetic operations to be carried out by a computer. This can not be considered inventive in the sense of Art. 56 EPC.

Examination EP1080438 / WO9954838

- Applicant appealed decision on 27-05-2004
 - Main Request (refused at Oral Proceedings)
 - Eight Auxiliary Requests
- Oral Proceedings for Appeal took place on 6.12.2006
 - Board of Appeals upheld decision of the examining division

however.....

EP1080438 / WO9954838 Decision T1161/04

- The Board considered that
 - *the apparatus of claim 1 had technical character, refusal on exclusion from patentability ART. 52 (2)(3) EPC not upheld. Nevertheless, apart from the input means, processing means and output means, the features of the claim did not contribute to the technical character of the invention; they merely defined the computer operations necessary to implement an algorithm for rebalancing a capitalization-weighted stock index.*

EP1080438 / WO9954838 Decision T1161/04

- The Board considered that
 - *the data input have no technical function. The processing performed on them comprises classification, scaling and redistribution, concerning exclusively the cognitive content of the data (their numerical value)... pure information processing which is as such excluded as a mental act by virtue of Article 52(2) EPC. Therefore these steps do not contribute to an inventive step. It follows that the technical task is reduced to the implementation of the process on a conventional computer, something which was obvious for the skilled person. The invention therefore does not involve an inventive step (Article 56 EPC).*

EP1080438 / WO9954838

Application granted in the US

US6061663

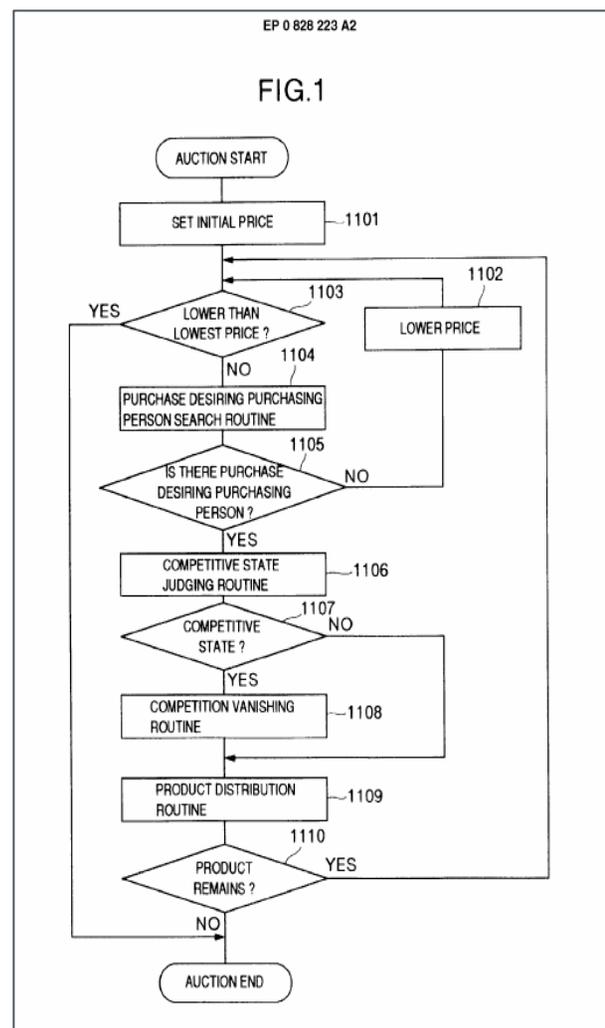
EP0828223 / US6044363 T0258/03 Hitachi

- An automatic auction method which makes it unnecessary for bidders to stay before auction terminals at the time of auction and which makes possible auction transactions on an open network on which it is difficult to assure the on-line and real time properties.
- Auction ordering information pieces each containing a desired price, number of purchase, and a highest possible price in competition for the desired price and received from bidder terminals via on-line circuits.
- Until an auction issue appears, the price is lowered. If there is at least one auction issue and a desired quantity which is the sum total of the numbers of purchase of the auction issues is not satisfied, then it is determined whether there is an auction issue coinciding in price by comparing the set price with (the desired price + the highest possible price in competition). Until the desired quantity is satisfied, the price is raised.

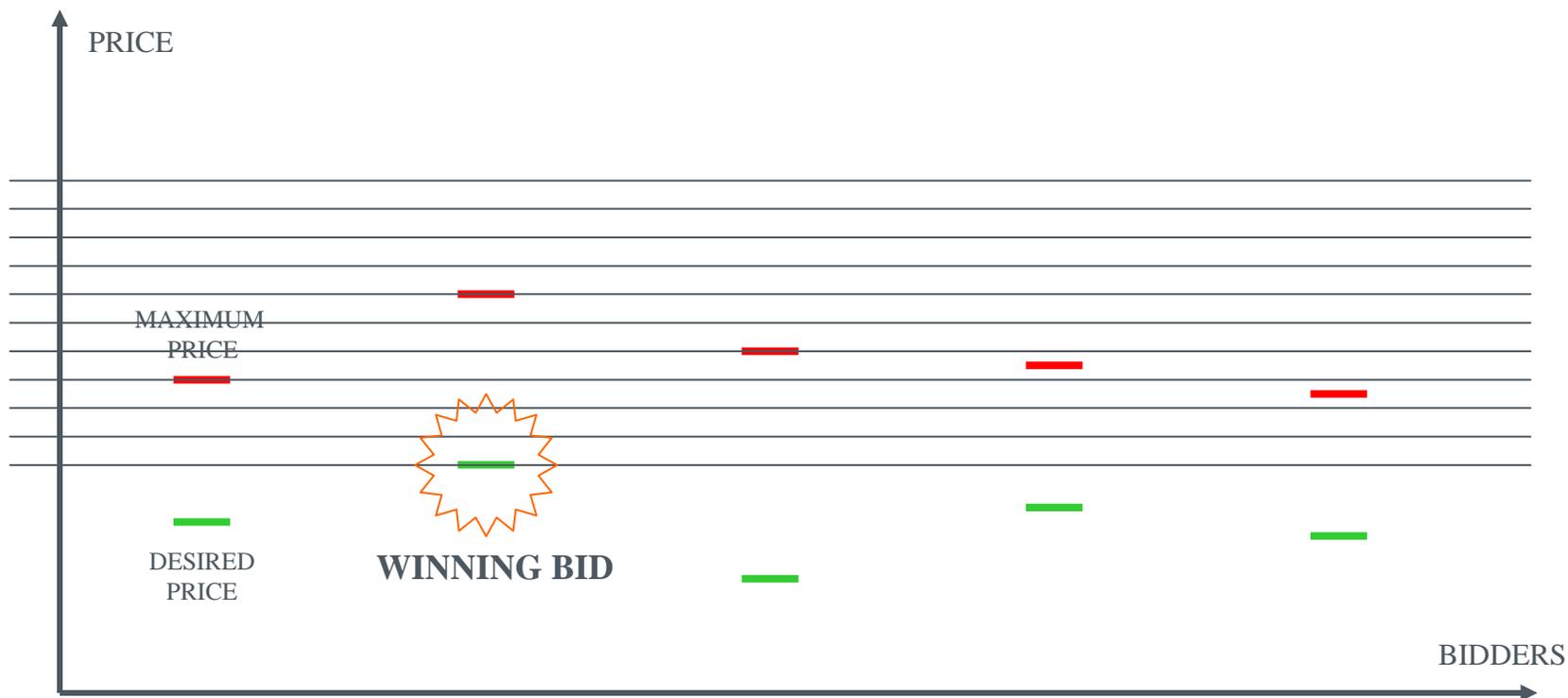
EP0828223 / US6044363 T0258/03 Hitachi

topic of the application:

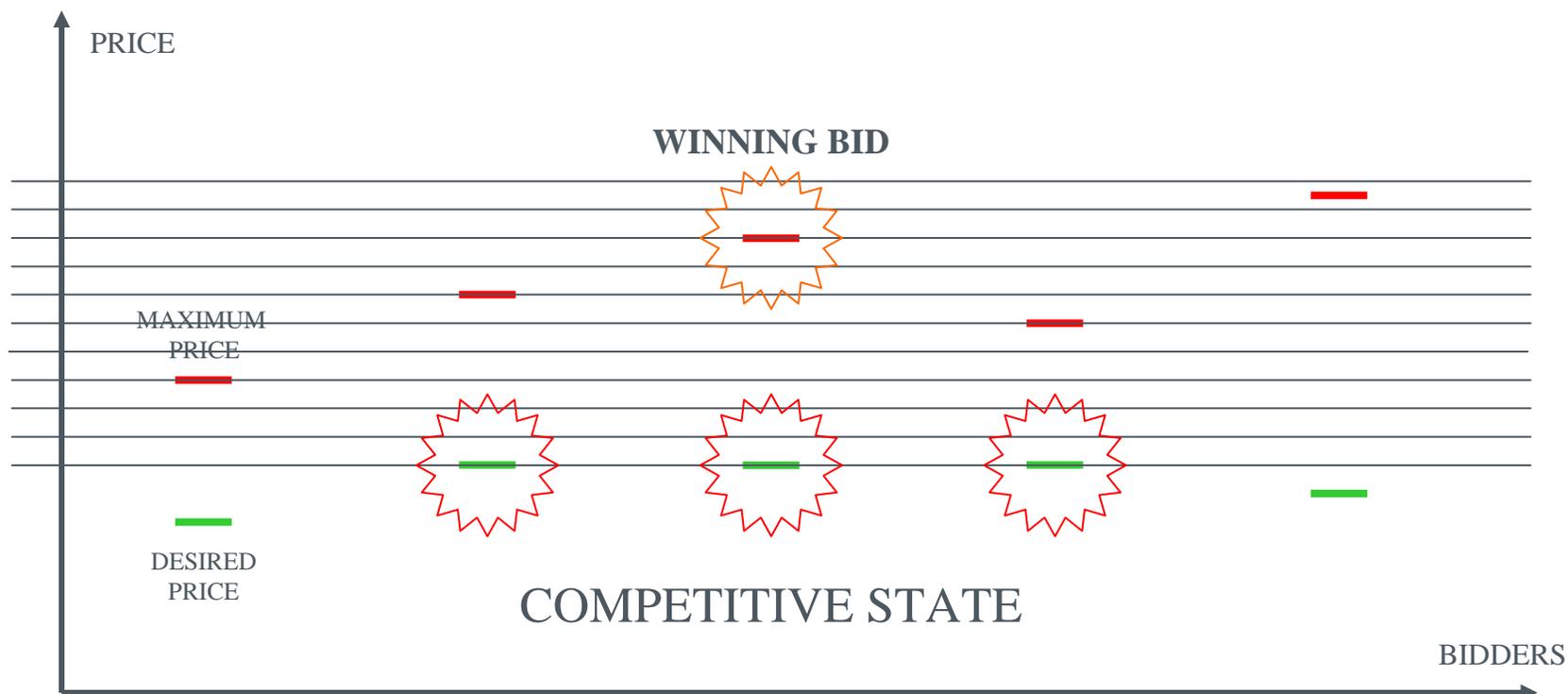
- computerized auction method
- Dutch auction



EP0828223 / US6044363 T0258/03 Hitachi



EP0828223 / US6044363 T0258/03 Hitachi



EP0828223 / US6044363

Original Claim 1:

A method of participation information delivery in an automatic auction system, comprising the steps of:

- displaying information about auction received via an on-line circuit;*
- selecting an auction subject specified by an operator out of displayed subjects;*
- creating, for said selected subject, auction ordering information including a desired price, number of purchase, and a highest possible price in competition for the desired price; and*
- transmitting said auction ordering information to an auctioneer terminal.*

Examination EP0828223 / US6044363

- Similar to previous case
 - Search Report (**not** Rule45 declaration)
 - First communication
 - Claim 1 objected as "method of doing business as such" Art. 52 (2)(3) EPC
 - Argumentation on inventive step also given Art. 56 EPC, prior art used as example
 - Reply of applicant with amended claims
 - Second communication, summons to Oral Proceedings
 - similar objections as in first communication
 - Reply to Summons with amended claims

Examination EP0828223 / US6044363

- Oral Proceedings took place

Claim 1 (second auxiliary request)

- An automatic auction method **executed in a server computer** comprising the steps of:
 - a) transmitting information on a product to be auctioned to a plurality of **client computers via a network**, each **client computer** belonging to a bidder;
 - b) receiving a plurality of auction ordering information pieces, each including a desired price and a maximum price in competitive state, for purchase of said product, from the plurality of **client computers** via the network; (continued)

Examination EP0828223 / US6044363

- c) **storing** the received auction ordering information pieces **in the server computer** for respective bidders;
- d) setting an auction price;
- e) determining whether there is any bidder who proposes a desired price equal to or higher than the auction price using the auction ordering information pieces stored in the server computer;
- if there is no bidder in the step e), lowering the auction price, and repeating the step e); (continued)

Examination EP0828223 / US6044363

Claim 1 cont.

- if there is more than one bidder at step e), judging whether there is more than one bidder for whom the auction price is less than or equal to the desired price such that a competitive state occurs using the auction ordering information pieces stored in the server computer;
- h) if the competitive state occurs, increasing the auction price by a predetermined value;
- i) excluding the bidder who proposes acceptable a price lower than the increased auction price and specifying the other bidder or bidders using the auction ordering information;
(continue)

Examination EP0828223 / US6044363

Claim (cont.)

- j) judging whether the competitive state occurs among the bidder or bidders specified in the step i);
- k) repeating the steps h), i) and j) and determining the remaining bidder as a successful bidder when there is no competitive state at step j; and
- l) if no competitive state occurs in the step g), determining the remaining bidder as a successful bidder.

Examination EP0828223 / US6044363

- Also.....
- Computerized auction apparatus....
- Computer program for carrying out an auction.....

Examination EP0828223 / US6044363

- Outcome Oral Proceedings
 - Claim 1 from Second Auxiliary Request refused
- Grounds
 - as in previous case
 - non patentable subject-matter, irrespective of claim category
 - inventive step argumentation in obiter dictum

Examination EP0828223 / US6044363 T258/03

- Applicant appealed; Oral proceedings took place
- Outcome
 - *Confirmation that prior art should **not** be considered when deciding on 52(2)(3) EPC questions*
 - *Reasoning starts from established principle that „invention“ stands for „subject-matter having technical character*
 - *Apparatus claim 3 is not excluded since it comprises technical features such as „server computer“, „client computers“, „network“*
 - *Reasoning for claim 3 is independent of claim category => method also **NOT** excluded*

Examination EP0828223 / US6044363 T258/03

- Conclusion

- *Rather broad interpretation of the term „invention“ in Article 52(1) EPC (act of writing with a pen on paper qualifies as „invention“)*
 - *„Entry hurdle“ of invention-requirement has again been lowered*
- *Even if a modified business scheme has some noticeable technical implications, it cannot contribute to the technical character of the claimed subject-matter and has to be disregarded for inventive step*
 - *Inventive step assessment becomes more important*

EP0828223 / US6044363

Application granted in the US

US6044363

EP1301887 / US6731927

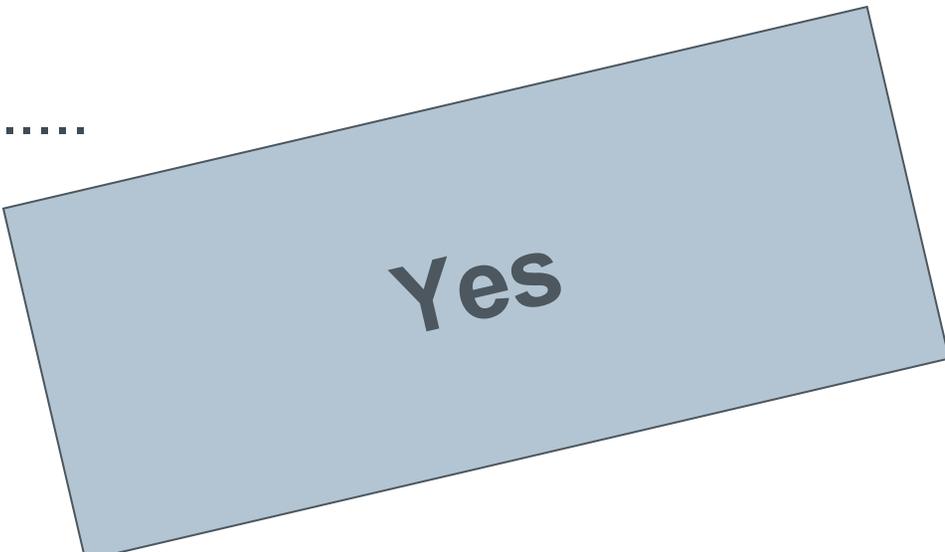
- *A wireless directory assistance system allows callers with discrete knowledge of the context listing of individuals or services to reach a subscriber without having access to the provider network or to proprietary information about the subscriber without authorization from the network. Subscribers can manage their own details on the service using an authorization code.*

EP1301887 / US6731927

- Originally PCT application
 - not searched
- EP Procedure
 - first communication
 - documents introduced in examination
 - main objection on inventive step Art. 56 EPC
 - reply with amended claims
 - second communication suggesting possible grant
 - reply with new claims
 - proposal of grant

EP1301887 / US6731927

- Application to be granted at the EPO
- Application granted in the US
- Are there differences?.....



Yes

EP1301887 / US6731927

- Claim 1 in US6531927

A method for providing information or access to a subscriber comprising the steps:

- *associating a subscriber or data with at least one predetermined context;*
- *locating the at least one context; and*
- *providing information or access to the subscriber or data when the at least one context is located, wherein a service provider of the subscriber or data provides the information or access to the subscriber or data.*

EP1301887 / US6731927

Original claim EP

- A method for wireless directory service and e-commerce across multi-provider networks, the method having the steps:
 - establishing a contextual listing where a subscriber or a provider network select contexts that are used to identify the subscriber in the listing;
 - associating the contexts in the contextual listing with a secure identity key;
 - searching the contextual listing when a context is given and determining the secure identity key associated thereto;
 - identifying at least one subscriber with the determined secure identity key; and
 - providing information or access to the identified subscriber.

EP1301887 / US6731927

01952752

CLMS

2005-09-26

Official Ref.: EP 1 301 887 (Application No. 01952752.2)
Applicant: Context connect, Inc.
Our Ref.: CCH0514PCTEP
Title: A SYSTEM AND METHOD FOR DIRECTORY SERVICES AND E-COMMERCE
ACROSS MULTI-PROVIDER NETWORKS

Patent Claims

1. A method for providing a user with a communication connection to a
5 subscriber over a communication network, the network including:
a call center (122) in communication with a contextual database (128), the
contextual database (128) storing a secure identity key (130) for each
respective subscriber and at least one context associated with each secure
identity key (130), and
10 a provider network (120) in communication with a subscriber database (124),
the subscriber database (124) storing subscriber contact information, the
provider network (120) also communicating with the call center (122);
the method comprising the steps of:
15 (a) receiving from a user (140) at the call center (122) a context for a targeted
subscriber;
(b) using the call center (122) to retrieve a matching context and the
associated secure identity key (130) from the contextual database (128)
without requiring use or exposure of contact information of the targeted
subscriber;
20 (c) forwarding the retrieved secure identity key (130) to the provider network
(120);
(d) retrieving from the subscriber database (124) contact information of the
targeted subscriber corresponding to the retrieved secure identity key
(130); and
25 (e) providing the user (140) a communication connection to the targeted
subscriber (200), or providing the targeted subscriber (200) with
information from, or relative to, the user (140), without requiring that the
subscriber contact information be released to the user (140), and without
requiring that the contact information of the targeted subscriber be
30 released from the provider network (120).

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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



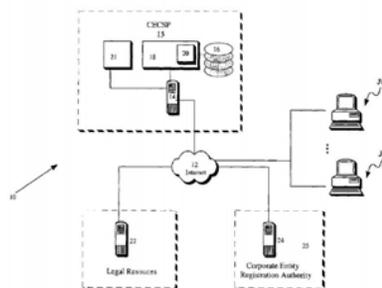
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- (71) Applicant and (72) Inventor: MACROSSAN, Neal, William [AU/AU]; 20 Price Street, Woolloowin, Brisbane, Queensland 4030 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, 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, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, 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, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (74) Agent: FREEHILLS CARTER SMITH BEADLE; Level 32, MLC Centre, 19-29 Martin Place, Sydney, New South Wales 2000 (AU).
- Published: — with international search report
- 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.

(54) Title: A METHOD AND SYSTEM FOR CREATING A CORPORATE ENTITY



(57) Abstract: A method, system and program for assisting in the formation of a corporate entity is disclosed. A session is established over an interactive communications device, such as the internet, during which a series of questions, made up of a plurality of question sets, is put to a user who wishes to establish the corporate entity. In response to the answers the user gives to the first set of questions, a further set of questions is selected. The selection is dependent on the answers given to the first set of questions. The user then answers the second set of questions. The answers are stored in a database. This process is repeated until the user has provided enough information to allow the documents legally required to create the corporate entity to be generated. The documents are generated and either sent in an electronic form to the user, for the user to print out and submit, mailed to the user, or submitted on behalf of the user.

WO 02/42953 A1

Conclusions

- Still open.....

Thank you for your attention

More information

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