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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 September 2011 (09.09.2011)

WIPO | PCT

(10) International Publication Number
WO 2011/109583 A3

(51) International Patent Classification:
G06Q 10/00 (2006.01)

(21) International Application Number:
PCT/US2011/026966

(22) International Filing Date:
3 March 2011 (03.03.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/718,446 5 March 2010 (05.03.2010) US

(71) Applicant *(for all designated States except US)*: **SIX CONTINENTS HOTELS, INC.** [US/US]; 3 Ravinia Drive, Suite 100, Atlanta, GA 30346 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GONZALEZ, Dario** [US/US]; 2030 Ector Overlook, Kennesaw, GA 30152 (US). **ONG, Tahchuan** [US/US]; 3045 Brockton Close, Marietta, GA 30068 (US). **TAN, Darren, Yeesoon** [MY/US]; 390 17th Street, Unit 5011, Atlanta, GA 30363 (US). **MCCLURE, Jonathan, P.** [US/US]; 2470 Hamptons Passage, Alpharetta, GA 30005 (US). **MATTEO, Santiago** [CL/US]; 2172 Deep Woods Way, Marietta, GA 30062 (US). **RAJARATHINAM, Rajienderkumar** [IN/US]; 4867 Ashford Dunwoody Road, Apt. 8315, Dunwoody, GA 30338 (US).

(74) Agents: **ADAMS, Scott, S.** et al.; Kilpatrick Townsend & Stockton LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:
28 February 2013

(54) Title: BOTTOM-UP OPTIMIZED SEARCH SYSTEM AND METHOD

(57) Abstract: A system and method for searching for hotel rooms is provided. A pre-compute database comprising real-time availability attributes associated with hotel rooms on a plurality of length of stays may be generated, and a query for at least one hotel for a date range may be received. The availability of each day within the date range on a plurality of length of stays may be calculated by applying business requirements according to the query. Final availability may be created for each day within the date range on the plurality of length of stays by combining the availability from the pre-compute database and the query attributes. A final availability of hotel rooms may be formatted for the at least one hotel for each day within the date range on the plurality of length of stays.

WO 2011/109583 A3