(12) 特許協力条約に基づいて公開された国際出願

(19) 世界知的所有権機関
国際事務局

(43) 国際公開日
2012 年 12 月 20 日(20.12.2012)

WIPO | PCT

(10) 国際公開番号
WO 2012/173042 A1

(51) 国際特許分類:
E03B 1/00 (2006.01) *G06Q 50/06* (2012.01)

(21) 国際出願番号: PCT/JP2012/064705

(22) 国際出願日: 2012 年 6 月 7 日(07.06.2012)

(25) 国際出願の言語: 日本語

(26) 国際公開の言語: 日本語

(30) 優先権データ:
特願 2011-132701 2011 年 6 月 14 日(14.06.2011) JP

(71) 出願人 (米国を除く全ての指定国について): 株式会社 東芝 **(KABUSHIKI KAISHA TOSHIBA)** [JP/JP]; 〒1058001 東京都港区芝浦一丁目１番１号 Tokyo (JP).

(72) 発明者; および
(75) 発明者/出願人 (米国についてのみ): 小林 尚志 **(KOBAYASHI, Hisashi)** [JP/JP]. 小林 義孝 **(KOBAYASHI, Yoshitaka)** [JP/JP]. 広岡 浩一 **(HIROOKA, Koichi)** [JP/JP]. 飯野 穣**(IINO, Yutaka)** [JP/JP]. 渋谷 真人**(SHIBUYA, Masato)** [JP/JP].

(74) 代理人: 蔵田 昌俊, 外 **(KURATA, Masatoshi** et al.); 〒1050001 東京都港区虎ノ門１丁目１２番９号 鈴榮特許綜合事務所内 Tokyo (JP).

(81) 指定国 (表示のない限り、全ての種類の国内保護が可能): 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, 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, QA, RO, RS, RU, RW, 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) 指定国 (表示のない限り、全ての種類の広域保護が可能): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア (AM, AZ, BY, KG, KZ, RU, TJ, TM), ヨーロッパ (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).

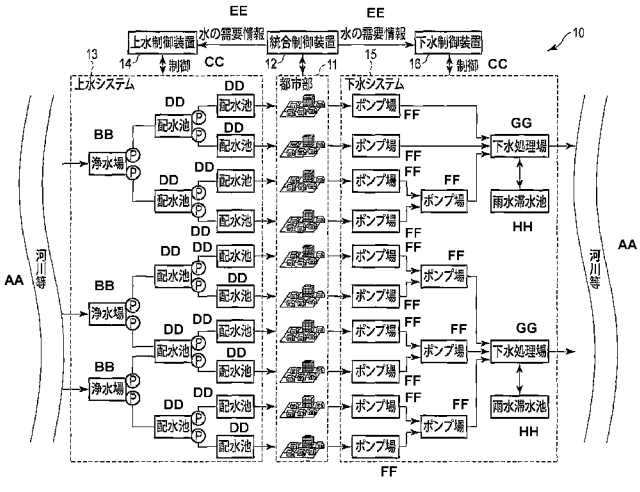
添付公開書類:
— 国際調査報告（条約第 21 条(3)）

WO 2012/173042 A1

(54) **Title**: WATER DEMAND-SUPPLY OPTIMIZATION SYSTEM, CONTROL SYSTEM AND PROGRAM

(54) 発明の名称 : 水需給最適化システム、制御システム及びプログラム

[図1]



AA River or the like
13 Water supply system
BB Water purification plant
14 Water supply control device
CC Control
DD Distribution reservoir
EE Water demand information
12 Integrated control device
11 Urban area
15 Sewage system
FF Pump station
16 Sewage control device
GG Sewage treatment plant
HH Rainwater reservoir

(57) **Abstract**: A water demand-supply optimization system which turns raw water taken from a water intake source into purified water in a water purification plant, delivers the purified water by a pump, and supplies the purified water to an urban area including a plurality of dwelling units via a distribution reservoir is provided with a management terminal, a measurement device, a demand information creation unit, and a water supply control device. The management terminal is provided in each of the plurality of dwelling units, and drives in-home equipment that performs an operation using water in a time zone in which the unit cost of electric power is low in each of the plurality of dwelling units. The measurement device is provided in each of the plurality of dwelling units, and measures the quantity of water used in the dwelling unit provided therewith. The demand information creation unit creates water demand information in the urban area on the basis of the quantity of water measured by the measurement device provided in each of the plurality of dwelling units. The water supply control device controls the pump so as to satisfy water demand indicated by the water demand information, and, with reference to variations in the unit cost of electric power, minimize the treatment cost in the water purification plant and the delivery cost of the purified water.

(57) 要約:

[続葉有]