



- (51) International Patent Classification:
G06F 17/50 (2006.01) *G06F 19/00* (2011.01)
- (21) International Application Number:
PCT/SG2012/000143
- (22) International Filing Date:
20 April 2012 (20.04.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/477,241 20 April 2011 (20.04.2011) US
- (71) Applicant (for all designated States except US): **MAS-
SACHUSETTS INSTITUTE OF TECHNOLOGY**
[US/US]; 77 Massachusetts Avenue, Cambridge, MA
02139-4307 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **PREIS, Amitsur**
[IL/SG]; c/o Singapore-MIT Alliance for Research and
Technology Centre, 3 Science Drive 2, S16-05-08, Singa-
pore 117543 (SG).
- (74) Agent: **ENGLISH, Matthew**; Marks & Clerk Singapore
LLP, Tanjong Pagar, P O Box 636, Singapore 910816
(SG).

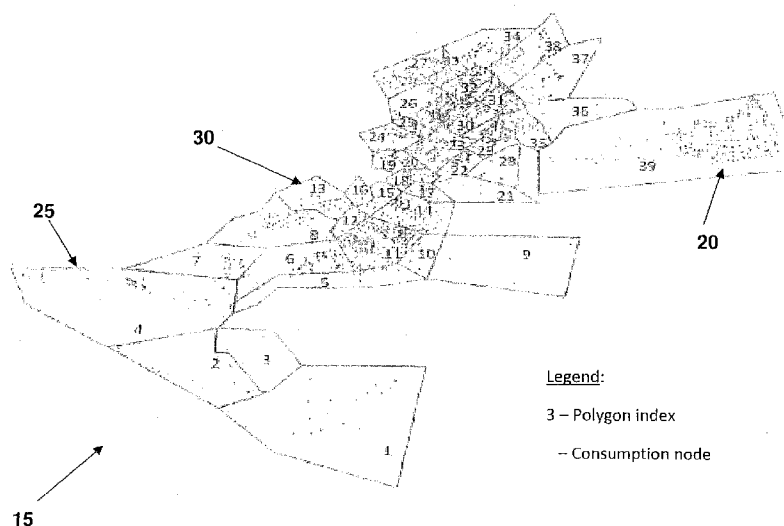
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, 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) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, 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))

(54) Title: A METHOD FOR THE CONSTRUCTION OF A WATER DISTRIBUTION MODEL



(57) Abstract: A method for the deter-
mination of demand zones for use with a
water distribution model of a water dis-
tribution network, the method compris-
ing the steps of: constructing polygons
about clusters of consumption nodes;
calculating base load consumption of the
nodes within each polygon; assigning a
consumption type to each polygon, and;
aggregating connected polygons of the
same consumption type into demand
zones.

Figure 3