

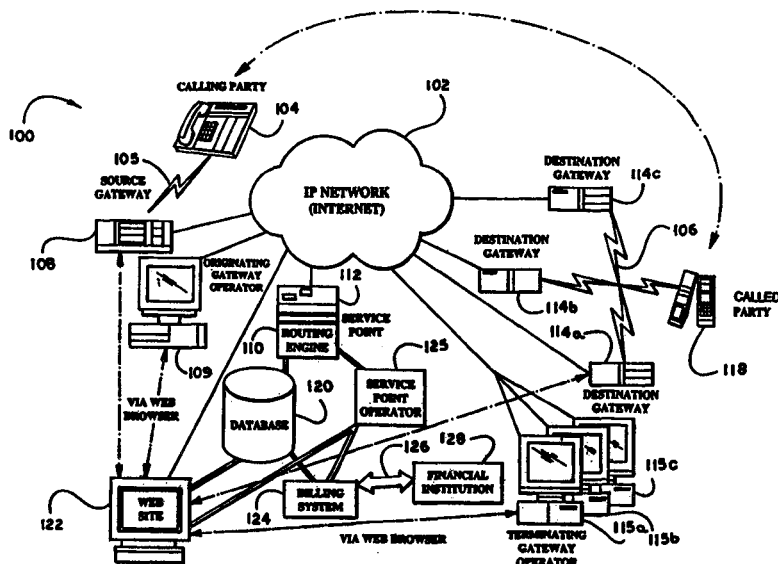


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04M 7/00, H04L 29/06	A3	(11) International Publication Number: WO 99/14931 (43) International Publication Date: 25 March 1999 (25.03.99)
(21) International Application Number: PCT/US98/19254 (22) International Filing Date: 16 September 1998 (16.09.98) (30) Priority Data: 60/059,087 16 September 1997 (16.09.97) US (71) Applicant: TRANSNEXUS, LLC [US/US]; Suite N-204, 430 Tenth Street, N.W., Atlanta, GA 30318 (US). (72) Inventors: DALTON, James, Pleasant, Gossett, Jr.; 3300 Wood Valley Drive Road, Atlanta, GA 30327 (US). DALTON, Alcina, de Figueiredo; 3300 Wood Valley Road, Atlanta, GA 30327 (US). THOMAS, Stephen, Anthony; 4397 Windsor Oaks Circle, Marietta, GA 30066 (US). COWN, Maria, Osterholt; 2854 Betula Drive, Austell, GA 30106 (US). VAUGHN, Rich, Carroll; 4383 Burnleigh Chase, Roswell, GA 30075 (US). SZCZERBINA, Pawel; 795 Hammond Drive #1604, Atlanta, GA 30328 (US). LOVETTE, Brian, Keith; 2540 Ingram Road, Duluth, GA 30136 (US). (74) Agents: PAVENTO, Michael, S. et al.; Jones & Askew, LLP, 37th floor, 191 Peachtree Street, N.E., Atlanta, GA 30303 (US).		(81) Designated States: 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, 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, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, 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). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 14 May 1999 (14.05.99)

(54) Title: INTERNET TELEPHONY CALL ROUTING ENGINE**(57) Abstract**

The present invention discloses a centralized routing engine that is able to assist gateways in making routing decisions for calls being placed in an IP network environment. Types of calls include voice, fax, video, etc. The routing engine provides significant flexibility to the gateways by allowing the gateways to designate preferences that define operational limits or requirements. A source gateway operator may set preferences such as the maximum price that is willing to be paid for a call, the maximum delay that will be tolerated and the maximum autonomous system hop count that will be tolerated. A destination gateway operator is likely only to be concerned with setting price schedules as preferences. Gateway operators may also set "preference criteria", which define the circumstances in which a certain set of preferences is to be applied. Based on preferences and preference criteria, the routing engine is able to locate destination gateways that are eligible to terminate a voice over telephony IP call. The routing engine provides a prioritized list of eligible destination gateways to the source gateway. The source gateway then works through the prioritized list and attempts to set up the voice over IP telephony call with each eligible destination gateway, until the call is established.



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