



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶:

H04Q 7/34

A2

(11) International Publication Number:

WO 98/25426

(43) International Publication Date:

11 June 1998 (11.06.98)

(21) International Application Number: PCT/GB97/03273

(22) International Filing Date: 27 November 1997 (27.11.97)

(30) Priority Data:

96308784.6 4 December 1996 (04.12.96) EP

(34) Countries for which the regional or international application was filed: GB et al.

(71) Applicant (for all designated States except US): BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY [GB/GB]; 81 Newgate Street, London EC1A 7AJ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CLAPTON, Alan, James [GB/GB]; 11 Winding Piece, Chapel St. Mary, Ipswich, Suffolk IP9 2UZ (GB). CHOTAI, Sunil [GB/GB]; 48 Coopers Road, Martlesham Heath, Ipswich, Suffolk IP5 7SJ (GB).

(74) Agent: LIDBETTER, Timothy, Guy, Edwin; BT Group Legal Services, Intellectual Property Dept., Holborn Centre, 8th floor, 120 Holborn, London EC1N 2TE (GB).

(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, 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, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

Without international search report and to be republished upon receipt of that report.

(54) Title: CALL SET-UP PROCESS

(57) Abstract

The arrangement disclosed allows a user of a mobile telephone (11) to use intelligent network (IN) services specific to his home network, regardless of whether the network (12, 13, 14) to which he is currently connected can support the service. When the user makes an outgoing call attempt (step 1) the associated signalling is transmitted over a signalling channel. The mobile switching centre (MSC) (13) recognises a customer identity (encoded electronically in the call set-up signals) and accesses the data relating to the user which is stored in a register (14). The data in the register (14) relating to the user (11) includes a marking identifying him as an IN served customer, causing the MSC (13) to halt the call process and send a signal (2), protocol, to the service control point (SCP) (15) in the user's home network. The SCP (15) then activates the user's service profile and as part of that profile recognises the need to retrieve additional information from the user (11), e.g. a PIN (personal identity number) or some other information. Having identified the information needed, the SCP initiates a message (3) to the mobile station, for example requesting an authorisation code, which is passed back to the MS (11) by way of the switching centre MSC (13) and base station BSS (12), using a signalling protocol. The user, having received the message (3), responds such that the mobile station (11) sends a second signal (4) by way of the host network back to the SCP (15). The SCP (15) acts on the message received and returns a response (5) to the MSC (13), whereby the MSC (13) will then act on that information for example to set up a call, including a full speech channel if required (6). This system allows data to be transmitted directly between the SCP (15) and the user (11), the host network not requiring to be compatible with the signalling protocols except for the initial and final stages (1, 5). Moreover, since signalling channels are used, traffic (speech) channels, which have a larger bandwidth, are not used unless and until the call set-up process is completed.

