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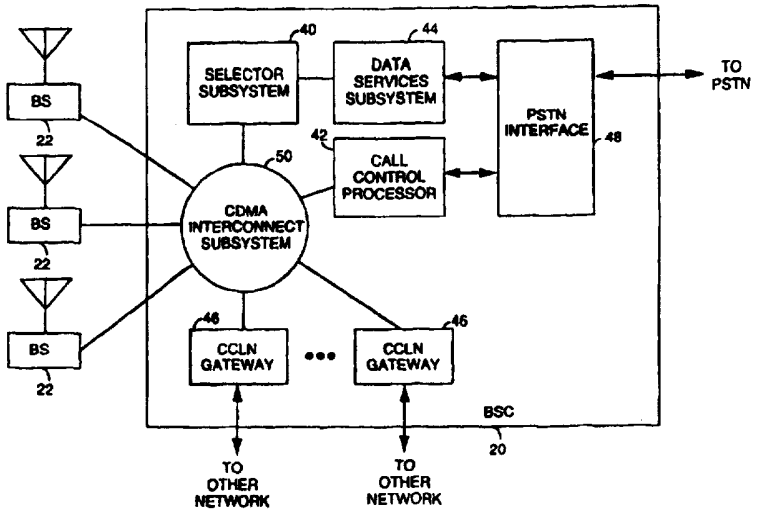

(57) Abstract

A novel and improved method and apparatus for performing an inter-system soft handoff is described. In accordance with the present invention, when a subscriber unit crosses from a first cellular system to a second cellular system, a base station controller (20) determines if sufficient network resources are available to conduct an inter-system soft handoff. If so, the base station controller (20) generates a set of signaling messages that cause a call processing resource to be allocated, and for the call to be processed at the second cellular system. The base station controller (20) then perform data-selection and data-broadcast for the call by transmitting data to the subscriber unit (28) by way of the second cellular system as well as via one or more base stations to which the base station controller (20) is directly coupled. The determination as to whether sufficient network resources are available to conduct the inter-system soft handoff is based on the type of connection that exists between the first cellular system and the second cellular system, the number of inter-system calls being conducted, and the frame offset of the call currently being processed.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A X	WO 95 15665 A (MOTOROLA INC) 8 June 1995 see page 2, line 11 - line 17 see page 2, line 30 - page 3, line 35 see page 4, line 18 - line 37 see page 6, line 12 - page 7, line 14 see page 7, line 26 - page 8, line 4 see page 9, line 27 - page 11, line 29 --- -/--	1,23,36 19,20,30

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Gerling, J.C.J.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	SIMMONS P ET AL: "SWITCHING HANDOVERS IN MICROCELLULAR MOBILE NETWORKS: AN ARCHITECTURAL EVOLUTION" PROCEEDINGS OF THE INTERNATIONAL SWITCHING SYMPOSIUM, YOKOHAMA, OCT. 25 - 30, 1992, vol. 1 - 2, INSTITUTE OF ELECTRONICS;INFORMATION AND COMMUNICATION ENGINEERS, pages 108-112, XP000337626 see page 109, right-hand column, paragraph 2.2 - page 110, left-hand column, paragraph 2.3 see page 111, left-hand column, paragraph 4.1 - page 112, right-hand column, paragraph 5. ---	1,19,30
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