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#### **Declarations under Rule 4.17:**

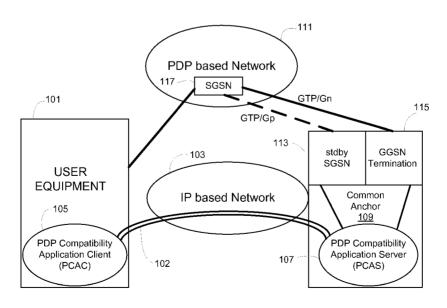
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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with international search report

[Continued on next page]

**(54) Title:** METHOD AND APPARATUS FOR PREPARING CONNECTION TRANSFER BETWEEN AN IP BASED COMMUNICATION SYSTEM (LTE/SAE) AND A PDP CONTEXT BASED COMMUNICATION SYSTEM (UMTS/GPRS)



(57) Abstract: In a method and apparatus for providing system interoperability in wireless communications an IP based client-server application maintains a proper set of PDP contexts while a mobile is connected via an IP based system such as LTE/SAE. The application client resides in the mobile and the server resides within the network at a common anchor point (115) between the IP based system. (103) and a PDP context based system (111). The PDP contexts are kept up to date but on hold until a handover occurs for the mobile from the IP based system (111).



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A. CLASSIFICATION OF SUBJECT MATTER INV. H04Q7/38 ADD. H04L12/56 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) H04Q H04L 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) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category<sup>1</sup> Relevant to claim No. χ, EP 1 646 189 A (MATSUSHITA ELECTRIC IND CO 1 - 25LTD [JP]) 12 April 2006 (2006-04-12) abstract figures 1-5 paragraphs [0017] - [0019] paragraph [0022] paragraphs [0070], [0075] paragraphs [0081], [0083] - [0089] claim 1 X US 2005/130659 A1 (GRECH SANDRO [FI] ET 1-4,6-911-14, AL) 16 June 2005 (2005-06-16) 16 - 18, 21abstract figures 1,2 paragraphs [0011], [0012] paragraphs [0016] - [0018] paragraphs [0025] - [0043] Х Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the A document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 28 March 2008 10/04/2008 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, Möll, Hans-Peter Fax: (+31-70) 340-3016

## INTERNATIONAL SEARCH REPORT

International application No
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	tion). DOCUMENTS CONSIDERED TO BE RELEVANT		T	
Category*	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.		
P,X	WO 2007/092804 A (LUCENT TECHNOLOGIES INC [US]; PALAT SUDEEP [GB]; CASATI ALESSIO [GB];) 16 August 2007 (2007-08-16)	1-4,6-9, 11-14, 16-18,21 5,10,15, 19,20, 22-25		
P,A	abstract			
	figures 1,2 page 2, line 1 - page 4, line 11 page 10, line 9 - page 16, line 10			
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### INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)			Publication date	
EP 1646189	A	12-04-2006	CN WO KR	101036356 2006037386 20070065903	A1	12-09-2007 13-04-2006 25-06-2007	
US 2005130659	A1	16-06-2005	EP WO	1639853 2005002267		29-03-2006 06-01-2005	
WO 2007092804	 А	16-08-2007	NON	 E			