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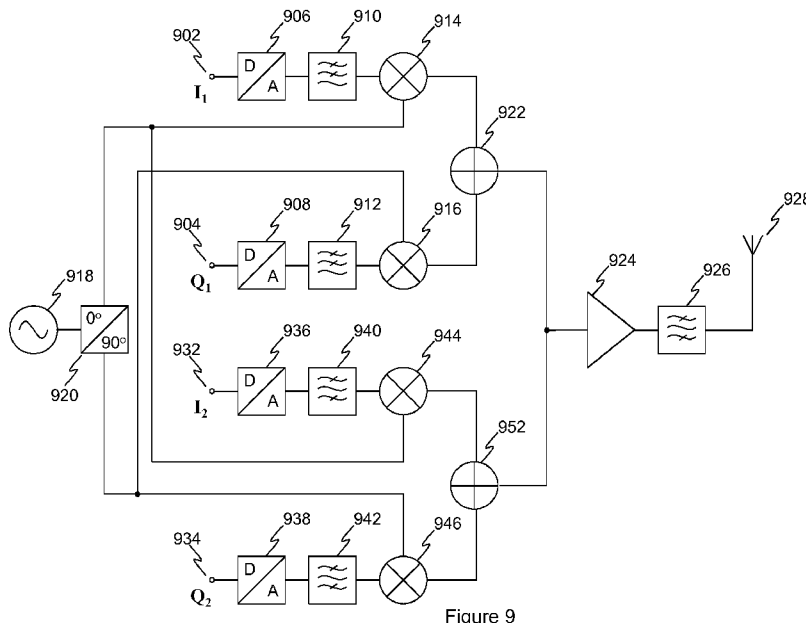
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[Continued on next page]

(54) Title: ADAPTIVE DIRECT CONVERSION/LOW-IF TRANSMITTER FOR CONTIGUOUS CARRIER AGGREGATION



(57) Abstract: Embodiments provide a transmitter and a method for transmitting data via a combination of a first signal modulated at a first carrier frequency, and a second signal modulated at a second carrier frequency, different to the first carrier frequency. In one embodiment the transmitter includes a local oscillator and is configured to adaptively configure the local oscillator to operate at a first local oscillator frequency and an alternative local oscillator frequency, different to the first frequency, in dependence on a required signal strength of the first signal relative to a required signal strength of the second signal.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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ADD.

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)
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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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	RAPEEPAT RATASUK ET AL: "Carrier Aggregation in LTE-Advanced", 2010 IEEE VEHICULAR TECHNOLOGY CONFERENCE (VTC 2010-SPRING) - 16-19 MAY 2010 - TAIPEI, TAIWAN, IEEE, US, 16 May 2010 (2010-05-16), pages 1-5, XP031696127, ISBN: 978-1-4244-2518-1 paragraph [IIIB]	1-26
A	WO 2004/062087 A1 (SIRIFIC WIRELESS CORP [CA]; KUNG WILLIAM [CA]; SNYDER CHRISTOPHER EUGE) 22 July 2004 (2004-07-22) figure 2 figure 3 page 7	1-26

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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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/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Douglas, Ian
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007/047669 A1 (MAK PUI-IN [CN] ET AL) 1 March 2007 (2007-03-01) paragraph [[0017]] paragraph [[0090]] -----	1-26
A	WO 2010/129584 A1 (QUALCOMM INC [US]; CONROY CORMAC S [US]; PALS TIMOTHY PAUL [US]) 11 November 2010 (2010-11-11) paragraph [[0097]] paragraph [[0050]] - paragraph [[0051]] -----	1-26
A	US 2009/239489 A1 (KACZMAN DANIEL L [US] ET AL) 24 September 2009 (2009-09-24) paragraph [[0023]] paragraph [[0030]] - paragraph [[0031]] paragraph [[0035]] paragraph [[0038]] -----	1-26

INTERNATIONAL SEARCH REPORT

Information on patent family members

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