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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/590,423	08/21/2012	Aleksandar Modrag Tasic	121973	9482
	7590 12/26/201 INCORPORATED	EXAMINER		
5775 MOREHO SAN DIEGO, O	OUSE DR.		TRAN, KHANH C	
			ART UNIT	PAPER NUMBER
			2631	
			NOTIFICATION DATE	DELIVERY MODE
			12/26/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No. 13/590,423	Applicant(s) TASIC ET AL.	
Office Action Summary	Examiner KHANH C. TRAN	Art Unit 2631	AIA (First Inventor to File) Status No
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with t	he corresponder	nce address
A SHORTENED STATUTORY PERIOD FOR REPL' THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of the provision of t	36(a). In no event, however, may a reply will apply and will expire SIX (6) MONTHS a cause the application to become ABAND	be timely filed from the mailing date of	of this communication. 13).
Status			
1) Responsive to communication(s) filed on 10/3 A declaration(s)/affidavit(s) under 37 CFR 1.1		<u></u>	
2a) ☐ This action is FINAL . 2b) ☐ This	action is non-final.		
3) An election was made by the applicant in resp	· ·		ing the interview on
 the restriction requirement and election Since this application is in condition for alloware closed in accordance with the practice under E 	nce except for formal matters	, prosecution as	
Disposition of Claims*			
5a) Of the above claim(s) is/are withdraw 6) □ Claim(s) is/are allowed. 7) □ Claim(s) is/are allowed. 8) □ Claim(s) 1,11,12,14,17 and 19 is/are rejected. 8) □ Claim(s) are subject to restriction and/or if any claims have been determined allowable, you may be exparticipating intellectual property office for the corresponding another://www.uspto.gov/patents/init_events/pph/index.jsp or send application Papers 10) □ The specification is objected to by the Examine 11) □ The drawing(s) filed on is/are: a) □ accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct	ted to. or election requirement. ligible to benefit from the Patent pplication. For more information, d an inquiry to <u>PPHfeedback@us</u> er. epted or b) objected to by to drawing(s) be held in abeyance.	please see oto.gov. he Examiner. See 37 CFR 1.85	5(a).
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign Certified copies: a) All b) Some** c) None of the: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Bureau	its have been received. Its have been received in Appority documents have been received in	lication No	
* See the attached detailed Office action for a list of the certifi	ed copies not received.		
Attachment(s) I) \(\sum \) Notice of References Cited (PTO-892)	3) ☐ Interview Sumr	mary (PTO-413)	
P) X Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/	Paper No/s\/M	ail Date	



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DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. The Amendment filed on 10/30/2014 has been entered. Claims 1-20 are still pending in this Office action.

Response to Arguments

3. Applicant's arguments filed 10/30/2014 have been fully considered but they are not persuasive for the following reasons:

In response to Applicants' arguments on page 7 that Regarding independent claims 1 and 17, Applicant's independent claims 1 and 17 recite, inter alia, "[a first amplifier stage configured to ... amplify/amplifying ... with a first amplifier stage] ... when the first amplifier stage is enabled ... and [a second amplifier stage configured to ... amplify/amplifying ... with a second amplifier stage] ... when the second amplifier stage is enabled," which is not disclosed in Kaukovuori"."

<u>The Examiner's response is that</u> Kaukovuori FIG. 15 **embodiment** discloses that RFIC1 amplifier and RFIC2 amplifier both are inherently enabled {Emphasis Added} (see further in column 10 lines 22-46).



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In response to Applicants' arguments on page 8 that Kaukovuori discloses: one potential method of receiving non-contiguous carrier aggregation signals is to receive separate clusters of component carriers in separate receiver chains, each having a LO signal of its own. This is depicted in FIG. 15, where Cluster 1 and Cluster 2 are each handled by a separate respective receiver chain, as shown in FIG. 15. (Kaukovuori, col.10, Ins. 23-28; emphasis added).

The Examiner's response is that Kaukovuori FIG. 15 embodiment, indeed, teaches method of receiving non-contiguous carrier aggregation signals is to receive separate clusters of component carriers in separate receiver chains, each having a LO signal of its own. FIG. 15 discloses a Radio Frequency Integrated Circuit (RFIC1) 1 including a first amplifier stage LNA, corresponding to the claimed first amplifier stage, to provide a first output RF signal (corresponding to the claimed first output RF signal, to a digital data path (corresponding to the claimed first load circuit). Furthermore, FIG. 15 discloses a Radio Frequency Integrated Circuit (RFIC2) 2 including a second amplifier stage LNA, corresponding to the claimed second amplifier stage, to provide a second output RF signal (corresponding to the claimed second output RF signal, to a different digital data path (corresponding to the claimed second load circuit). In column 10 lines 22-30, each separate received cluster (e.g. clusters 1 and 2) includes component carries that correspond to the claimed at least a first carrier of the multiple carrier and to the claimed at least a second carrier of the multiple carrier.



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In response to Applicants' arguments on page 8 that when the clusters have unequal bandwidths, the choice of bandwidth (BW) setups for both receiver chains may be performed in order to reconfigure the receiver such that receiver performance is optimal. Typically, the first branch may be configured in a first mode to have a first bandpass filter bandwidth to give first bandpass filtered inphase and quadrature components, and may be configured in a second mode to have a first lowpass filter bandwidth to give first lowpass filtered inphase and quadrature components. In the first mode, a second branch may be configured, for example as shown in FIG. 24 within the dashed lines, and for example as shown in FIG. 10 or FIG. 11, to have a second bandpass filter bandwidth, different from the first bandpass filter bandwidth, to give second bandpass filtered inphase and quadrature components. In the second mode, the first branch may be used as a conventional DCR receiver, for example to receive single carrier or contiguous carrier signals, and the second branch, also referred to as an additional branch, may be not used, for example by being disconnected or turned off. (Kaukovuori, col. 13, Ins. 28-46; emphasis added).

The Examiner's response is that, as recited in last Office action, Kaukovuori FIG. 15 embodiment the two clusters are each received with different bandwidth filter (see column 10, lines 22-53). Kaukovuori foregoing disclosure teaches the claimed features "at least a first carrier of the multiple carrier and to the claimed at least a second carrier of the multiple carrier". Applicants' arguments using FIG. 10 FIG. 11 and FIG. 24 are irrelevant since those figures represent different embodiments, which the current rejection is not relied on, in Kaukovuori teachings.

In response to Applicants' arguments on page 9 that

35 U.S.C. § 103(a) Obviousness Rejections NOTE: The rejection of claim 19 in the Office Action appears to contain a typographical error. Specifically, the Office Action rejected claims 1, 11, 12,



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