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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 |
| 23696 | 7590 | 12/26/2014 | EXAMINER | |
| QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121 | | | 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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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".

The Examiner's response is that 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).

Art Unit: 2631

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.

Art Unit: 2631

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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