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13/271,806	10/12/2011	Martino M. Freda	IDC-10801US02	7747
24374	7590	06/20/2013	EXAMINER	
VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			KARIKARI, KWASI	
			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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eoffice@volpe-koenig.com



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## **DETAILED ACTION**

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/09/2013 has been entered

### **Response to Arguments**

2. Applicant's arguments, filed on 04/09/2013 with respect to claims 22-27 in the remarks, have been considered but are moot in view of the new ground(s) of rejection.

### **Claim Rejections - 35 USC § 112**

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 recite the claimed limitations of "...the available channels...", however, there are insufficient prior antecedent basis for these limitations in the claims.

All claims that depend on the above rejected claims are also rejected for fully incorporating the deficiencies of the above rejected claims from which they depend.

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For complete examination purposes, the Examiner will broadly address the above rejected claim in light of the overall concept of Applicant's invention. Appropriate corrections are therefore required.

### **Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 22-26 are rejected under U.S.C. 102(e) as being anticipated by Junell et al., (U.S 2011/0305206), (hereinafter, Junell).**

**Regarding claims 22 and 23, Junell discloses a multi-spectrum network that provides management of resource allocation, the multi-spectrum network/method (= **method of requesting resource in TV white space type environment, see [0067 and 0070]**), comprising:**

a coexistence manager configured to evaluate receive the spectrum a resource allocation request (**= resource request by a network, see [0072 and 0075]**); and

a database configured to store information regarding available resources across multiple networks and retrieve resource usage data for the available channels across the multiple networks (**= database 104 contains identity of locally free secondary**

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**channels in local TV white, maritime and satellite earth station radio white space bands, see [0207 and 0013]; and manager 102 accesses database 104 to obtain free/available secondary channel in TV white space, see [0015-16, 0067, 0102 and 0117]; whereby the free/available white space is being associated with the “resource usage data”) wherein the coexistence manager is further configured to solve coexistence conflicts by examining available resources stored in the database (= The coexistence manager 102 accesses the primary database 104 to obtain available secondary channels in the TV white space band. The coexistence manager 102 accesses the coexistence network element CoexServ 106 to obtain Potential neighbor networks' addresses. The coexistence manager 102 processes this data in conjunction with Spectrum maps, Operational parameters, and Time base sync, to determine a resource reallocation for the coexistence enabler 100 in device STA1. The coexistence manager 102 then sends to the coexistence enabler 100 in device STA1 the resource reallocation, including Operational parameters, Quiet period parameters, Spectrum sensing strategy, and Time base sync, see [0099]) and assist in selecting the resource allocation based on the request and the stored available resource information (= **Coexistence standards...enables two or more independently operated wireless networks or devices using different radio technologies adapted for white space frequency bands, to access the same white space frequency band in the same location without mutual interference, see [0066 and 0070]; and coexistence manager 103/103 handles resource requests and reallocates white spaces band including Quiet period parameters, Spectrum****

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**sensing strategy for wireless devices without mutual interference, see [0098, 0121, 0163 and 0210]).**

**Regarding claim 24**, as recited in claim 23, **Junell** discloses the method, wherein the resource allocation request is a spectrum allocation request (see, [0015-16, 0072, 0075 and 0097]).

**Regarding claim 25**, as recited in claim 22, **Junell** discloses the method, wherein the coexistence manager is located within a base station management system.  
(see, CM 102 in Fig. 1A and 1B).

**Regarding claim 26**, as recited in claim 23, **Junell** further discloses the method, wherein the coexistence manager checks the information stored regarding available channels based on a geographical location (see, [0013, 0207 and 0209]).

4. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Junell in view of Choi and further in view of Chaudhri et al., (U.S 2010/0081449), (hereinafter, Chaudhri).**

**Regarding claim 27**, as recited in claim 23, **Junell** explicitly fails to disclose the method, wherein the coexistence manager prepares a ranked resource candidate list.

However, **Chaudhri**, which is an analogous art, equivalently discloses the method,

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wherein the coexistence manager prepares a ranked resource candidate list (see, [0045-46]).

Therefore, it would have been obvious at the time the invention was made for one of the ordinary skill in the art to have combined the teaching of Chaudhri with Junell for the benefit of achieving a data management system that includes cognitive radio for channel detection thereby, avoiding interference among cognitive network and incumbent system.

### **Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-T (6:30 - 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904.

**The fax phone number** for the organization where this application or proceeding is assigned is **571-273-8566**.

### **STATUS OF APPLICATION**

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

<p><b>/Kwasi Karikari/ Primary Examiner: Art Unit 2641.</b></p>
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