**Title:** SYSTEM AND METHOD FOR SPECTRUM MANAGEMENT

**Abstract:** Transferring spectrum use rights may include ascertaining information regarding available spectrum for use in wireless communications. A request for spectrum use from a spectrum user system may be matched with available spectrum. A spectrum certificate may be issued to the spectrum user system, where the spectrum certificate contains at least one spectrum-related variable under which the spectrum user system is to engage in wireless communications.
INTERNATIONAL SEARCH REPORT

A  CLASSIFICATION OF SUBJECT MATTER
IPCA(8) - G06Q 50/00 (2007.10)
USPC - 705/8
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)
USPC - 705/8
IPCA(8) - G06Q 50/00 (2007 10)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 705/1, 8,702/75. 76, see keywords below

C  DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim N o</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 2006/01431 11 A1 (MYLET) 29 June 2006 (29 06 2006) para [0011], [0040], [0045], [0047], [0050], [0052], [0053], [0058], [0063], [0067], [0080], [0091]</td>
<td>170 1-3, 14-16, 43-45, 56-58, 171-173</td>
</tr>
<tr>
<td>Y</td>
<td>US 2006/0083205 A1 (BUDDHIKOT et al) 20 April 2006 (20 04 2006) para [0006], [0007], [0033], [0035], [0039], [0040], [0041], [0044], [0045], [0048], [0054], [0056], [0064], [0067], [0068], [0073], [0074], [0080]</td>
<td>85-88, 100-104, 116, 171-173</td>
</tr>
</tbody>
</table>

I  Further documents are listed in the continuation of Box C

Special categories of cited documents

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

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on novelty claimed(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"R" 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 invention

"Y" 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

"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

Document member of the same patent family

Date of the actual completion of the international search
21 July 2008 (21 07 2008)

Date of mailing of the international search report
30 JUL 2008

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450

Authorized officer
Lee W Young

INTERNATIONAL SEARCH REPORT

Observations where certain claims were found unsearchable
(Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1 □□ Claims Nos
because they relate to subject matter not required to be searched by this Authority, namely

2 □□ Claims Nos
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be earned out, specifically

3 □□ Claims Nos See Extra Sheet
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 64(a)

Observations where unity of invention is lacking
(Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows

Please See Extra Sheet

1 □□ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims

2 □□ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees

3 □□ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos 1-3, 14-16, 43-45, 56-58, 85-88, 100-104, 116 and 170-173

4 □□ No required additional search fees were timely paid by the applicant Consequently, this international search report is restricted to the invention first mentioned in the claims, it is covered by claims Nos

Remark on Protest □□ The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee

□□□ The additional search fees were accompanied by the applicant’s protest but the applicable protest fee was not paid within the time limit specified in the invitation

□□□ No protest accompanied the payment of additional search fees

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2007)
Box No. II Observations where certain claims were found unsearchable

Claims 4-13, 17-42, 46-55, 59-84, 89-99, 105-115, 122-130, 135-138, 144-153, 159-161, 164, 165, 169 and 174-177 have been found to be unsearchable under Article 17(2)(b) because of defects under Article 17(2)(a) and therefore have not been included with any invention. Specifically, these are dependent claims not drafted in accordance with the second and third sentence of PCT Rule 6.4(a).
INTERNATIONAL SEARCH REPORT

International application No
PCT/US 08/55861

Box No III Observations where unity of invention is lacking

The application for invention does not comply with the requirement for unity of invention (Rules 13 1, 13 2 and 13 3) for the reasons indicated below

According to PCT Rule 13 2, and the Administrative Instructions, Annex B (b), unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding ‘special technical features’. The expression ‘special technical features’ is defined in Rule 13 2 as meaning those technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art.

Group I claims 1-3, 14-16 to a method of transferring spectrum rights use

Group II claims 43-45, 56-58 and 170-173 in part, to a spectrum broker system

Group III claims 85-88, 100-104, 116 to a method of generating and analyzing a spectrum commodity item

Group IV claims 117-121, 131-134, 154-158 to a method of controlling or policing spectrum use

Group V claims 139-143, 166-168 and 170-173 in part to a wireless radio system with demand analyzer

Group VI claims 162, 163 and 164, in part to a spectrum holder system

The shared technical feature among the aforementioned Groups (I-VI), is the use of a spectrum certificate (or commodity item) that incorporates or records information regarding a frequency-based spectral mask (interference), transmitted power limit, and a geography-based emission mask. This is not a special technical feature as such is known in the prior art. For instance, US 2006/0218392 A1 (Johnston) discloses the use of a certificated declaration of spectrum licensed, or spectrum certificate that incorporates transmitter location (geographic emission), tolerable interference footprint (spectral mask), and transmission power levels (or limits), and other information regarding the licensee’s transmission (para [0015], [0018]). Therefore, Groups I-VI share a common technical feature that is not special and so lack unity of invention, according to PCT Rule 13 2.