

Title (en)
REAL-TIME RADIO SPECTRUM ASSESSMENT ENGINE

Title (de)
ECHTZEIT-RADIO SPEKTRUMBEURTEILUNGSMASCHINE

Title (fr)
MACHINE POUR ÉVALUATION DE RADIO SPECTRUM EN TEMPS RÉEL

Publication
EP 2959592 A1 20151230 (EN)

Application
EP 14710455 A 20140225

Priority

- US 201313776562 A 20130225
- US 201313776528 A 20130225
- US 201313776476 A 20130225
- US 201313776575 A 20130225
- US 201313776587 A 20130225
- US 201313776548 A 20130225
- US 201313776505 A 20130225
- US 2014018429 W 20140225

Abstract (en)
[origin: WO2014131036A1] A decoder for a modulation scheme is configured to operate close to the radio noise floor. A correlation value may be constantly updated, in an effort to match to a signature to a preamble of a packet. A low clamp value may act as a floor to which a calculated correlation value is set, if it is less than the low clamp value. If a correlation threshold is exceeded, then the correlation value is examined to determine it is a peak value. If the peak is found, power of the preamble is compared to a power threshold that is relative to the radio noise floor. If the power threshold is exceeded, positive correlation is detected. A channel optimizer is used to remove the frequency misalignment. This enables the use of a filter that is approximately equal to the occupied bandwidth of the incoming signal, further rejecting noise and interference.

IPC 8 full level
H04B 1/00 (2006.01); **H04L 1/00** (2006.01); **H04L 27/00** (2006.01); **H04L 27/14** (2006.01); **H04W 16/14** (2009.01); **H04W 28/18** (2009.01); **H04W 52/20** (2009.01)

CPC (source: EP)
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Citation (search report)
See references of WO 2014131047A1

Citation (examination)
US 2012224612 A1 20120906 - KIM YOUHAN [US], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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