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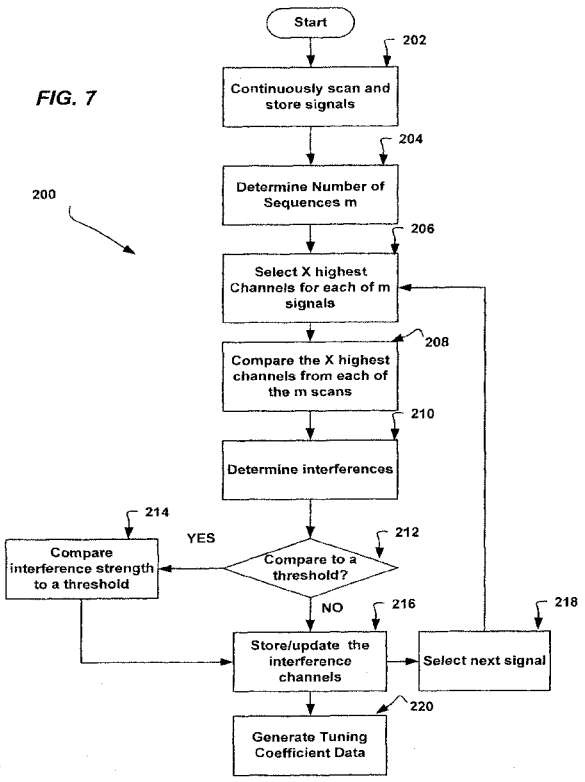
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[Continued on next page]

(54) Title: SELF-ADAPTIVE DIGITAL RF BANDPASS AND BANDSTOP FILTER ARCHITECTURE

FIG. 7



(57) Abstract: A system and method provides adaptive digital front end control of an incoming radio frequency (RF) signal to identify RF characteristics in that signal, such as interference or desired data signals and adaptively control digital filter elements to selectively tune only portions of the RF signal to produce a filtered output signal, on a per cycle basis, prior to communicating the RF signal to an underlying wireless communication device, such as a base station in cellular network, cellular phone, wireless router base station, cognitive radio, or other wireless communication device. Each digital filter element may be tuned in frequency and bandwidth of operation and collectively the elements form an adaptive filter stage with elements configurable into both bandpass and bandstop filters for cascaded operation.

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B. FIELDS SEARCHED

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Korean utility models and applications for utility models
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: adaptive, correlation, signal strength, coefficient

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005-0078734 A1 (DAVID BAKER, MARK JUSTIN MOORE) 14 April 2005 See [0032] - [0118].	1,2-29,30,31-57,58,59-74,75,76-81
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☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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