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Patent Number(s): WO2012050612-A1
Title: Terahertz and millimeter wave imaging system e.g. for power utility boiler, has electronics-stware that converts beam radiation into electrical signal, and interprets electrical signal to yield information about geometric structure
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Patent Assignee(s): ENERTECHNIX INC (ENER-Non-standard)
Derwent Primary Accession No.: 2012-E54576
Abstract: NOVELTY - The terahertz and millimeter wave imaging system has a generator that produces illuminating beam wave radiation in terahertz and millimeter electromagnetic spectrum to illuminate internal structures. A receiver collects illuminating beam radiation after reflection from the internal structures. Electronics-stware converts the collected radiation into electrical signal, and interprets the electrical signal to yield information such as the presence and thickness surface deposits on the geometric structure.
USE - Terahertz and millimeter wave imaging system for producing images and quantitative measurements internal geometric structure e.g. steam tube and interior wall. Uses include but are not limited to inside high temperature industrial process unit such as power utility boiler, kraft recovery boiler, cement kiln and petrochemical refinery furnace.
ADVANTAGE - The system produces clear images deposits inside operating high temperature process equipment, while allowing direct inspection and measurement deposit thickness in tube.
DESCRIPTION DRAWING(S) - The drawing shows the schematic plan view an arrangement for fixed mount scanning millimeter wave radar deposit monitor.
Drawing:
Derwent Class Code(s): S03 (Scientific Instrumentation, photometry, calorimetry)
Derwent Manual Code(s): S03-E05E
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WO2007143474-A1 SHELL OIL CO (SHEL); SHELL INT RES MIJ BV (SHEL); SHELL CANADA LTD (SHEL) APPEL M; DRIA D E; EPPING W J M; PEARCE J G