

Title (en)
A DETECTING SYSTEM FOR A STRING INSTRUMENT

Title (de)
DETEKTIONSSYSTEM FÜR EIN SAITENINSTRUMENT

Title (fr)
SYSTÈME DE DÉTECTION POUR UN INSTRUMENT À CORDES

Publication
EP 2959472 A4 20160803 (EN)

Application
EP 15765489 A 20150309

Priority
• US 201461954937 P 20140318
• IL 2015050244 W 20150309

Abstract (en)
[origin: WO2015140783A1] A detection system is provided for detecting a musical note played on a string instrument having a fretboard provided with a plurality of conductive frets and conductive strings. The system includes at least one conductor coupled to each of the frets; an inverter having a first terminal coupled to the conductor and a second terminal coupled to the conductive string, the inverter being configured to logically invert a signal transmitted therethrough, such that when the conductive string is pressed against one of the frets allowing thereby for a signal to be transmitted therethrough, the signal is sequentially inverted between two logical states at a frequency being dependent on the distance between the inverter and the fret; a frequency detector configured to measure the frequency; and a controller configured for determining the location of the fret along the fretboard in accordance with the frequency, and to thereby detect the musical note.

IPC 8 full level
G10H 1/34 (2006.01)

CPC (source: EP)
G10H 1/342 (2013.01); **G10H 2220/171** (2013.01); **G10H 2220/301** (2013.01)

Citation (search report)
• [T] M K MANDAL ET AL: "Ring oscillators: Characteristics and applications", INDIAN JOURNAL OF PURE & APPLIED PHYSICS, 28 February 2010 (2010-02-28), pages 136 - 145, XP055282128, Retrieved from the Internet <URL:http://nopr.niscair.res.in/bitstream/123456789/7244/1/IJPAP%2048%282%29%20136-145.pdf> [retrieved on 20160620]
• See references of WO 2015140783A1

Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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DOCDB simple family (application)
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