

Title (en)

Device and method for reducing a vibration of a board, in particular a transparent board

Title (de)

Vorrichtung und Verfahren zur Reduktion einer Schwingung einer insbesondere transparenten Platte

Title (fr)

Dispositif et procédé de réduction des oscillations d'une plaque transparente en particulier

Publication

EP 2509069 A3 20140820 (DE)

Application

EP 12163205 A 20120404

Priority

AT 4752011 A 20110404

Abstract (en)

[origin: EP2509069A2] The method involves recording measuring data from an edge area (4) of a vibrating plate (2). The plate is loaded over the edge area with the compensation vibration depending upon the measuring data. The measuring data records parameters for each quadrant (15,16,17,18) of the plate at points of the edge area of maximum curvature of vibration modes of the plate through a linear combination to suitable measuring data. Independent claims are included for the following: (1) a device for reducing vibration of a transparent plate, particularly a disk used in a window; and (2) a modal space control unit for vibration reducing device.

IPC 8 full level

G10K 11/178 (2006.01); **E06B 5/20** (2006.01)

CPC (source: EP)

G10K 11/178 (2013.01); **G10K 2210/1291** (2013.01)

Citation (search report)

- [X1] JP 2010106537 A 20100513 - FUJIFILM CORP
- [X1] YOUNG-HUN LIM: "Finite-element simulation of closed loop vibration control of a smart plate under transient loading; Finite-element simulation of closed loop vibration control of a smart plate under transient loading", SMART MATERIALS AND STRUCTURES, IOP PUBLISHING LTD., BRISTOL, GB, vol. 12, no. 2, 27 March 2003 (2003-03-27), pages 272 - 286, XP020071737, ISSN: 0964-1726, DOI: 10.1088/0964-1726/12/2/316
- [A] FALANGAS E T ET AL: "Controlling plate vibrations using piezoelectric actuators", IEEE CONTROL SYSTEMS, IEEE, USA, vol. 14, no. 4, 1 August 1994 (1994-08-01), pages 34 - 41, XP011422737, ISSN: 1066-033X, DOI: 10.1109/37.295968
- [A] PAOLO GARDONIO ET AL: "A smart panel with active damping wedges along the perimeter; A smart panel with active damping wedges along the perimeter", SMART MATERIALS AND STRUCTURES, IOP PUBLISHING LTD., BRISTOL, GB, vol. 19, no. 6, 18 May 2010 (2010-05-18), pages 65033, XP020193026, ISSN: 0964-1726, DOI: 10.1088/0964-1726/19/6/065033

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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)

EP 2509069 A2 20121010; EP 2509069 A3 20140820; AT 511225 A1 20121015; AT 511225 B1 20130115

DOCDB simple family (application)

EP 12163205 A 20120404; AT 4752011 A 20110404