

Title (en)

SYSTEM FOR TRANSMITTING VIBRATIONS FROM A STRING TO THE WALLS OF A HOLLOW BODY

Publication

EP 0352310 B1 19920722 (DE)

Application

EP 89900794 A 19881229

Priority

DE 3802245 A 19880127

Abstract (en)

[origin: WO8907308A1] In a system for transmitting vibrations of strings to the walls of a hollow body, the strings are tensioned as usual on a bridge, the movements of which are transmitted to a mobile wall of the hollow body. This narrow wall, which has a relatively small surface area, does not principally cause the surrounding air to vibrate, but transmits the string vibrations by means of wall supports of the hollow body, which have a large surface area. The support points of the bridge on the narrow wall of the hollow body, the walls of the hollow body and the supports are arranged in such a manner that when the bridge vibrates in a direction under the effect of the cord vibration, the large surface areas of the hollow body move in opposite directions. The main purpose of the large surface areas of the hollow body is to cause the surrounding air to vibrate, on the one hand directly, owing to the movements on the surface of the hollow body and indirectly, on the other hand, owing to the pumping effect exerted on the air in the hollow body by the large surface areas when these move in opposite directions. In turn, the air contained in the hollow body causes the surrounding air to move via passages arranged in the walls. This transmission mechanism enables vibratory walls of larger dimensions to be provided, as well as greater vibration amplitudes and larger hollow bodies than those of comparable instruments, so that louder sounds are obtained with the same energy used for actuating the strings.

IPC 1-7

G10D 3/02

IPC 8 full level

G10D 3/02 (2006.01); **G10D 1/02** (2006.01); **G10D 3/04** (2006.01)

CPC (source: EP US)

G10D 3/04 (2013.01 - EP US)

Designated contracting state (EPC)

CH FR GB IT LI

DOCDB simple family (publication)

DE 3802245 C1 19890323; EP 0352310 A1 19900131; EP 0352310 B1 19920722; JP H02501510 A 19900524; JP H0330157 B2 19910426; RU 1830146 C 19930723; US 5044246 A 19910903; WO 8907308 A1 19890810

DOCDB simple family (application)

DE 3802245 A 19880127; DE 8800785 W 19881229; EP 89900794 A 19881229; JP 50070189 A 19881229; SU 4742153 A 19890927; US 41528089 A 19890817