

Title (en)

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

Publication

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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.

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