

Title (en)
PIEZO-ELECTRIC RINGING TRANSDUCER

Publication
EP 0025955 B1 19850123 (DE)

Application
EP 80105477 A 19800912

Priority
DE 2937922 A 19790919

Abstract (en)
[origin: EP0025955A1] 1. A piezo-electric transducer for radiating a ringing tone, having a transducer plate (3) clamped between two elastic support bodies (4, 5) at the edge thereof and provided with a piezo-electric layer (2) controlled by a ringing tone oscillator, which supplies two a.c. signals, in particular for telephone installations, characterised in that the frequencies of the signals are tuned to two resonance frequencies of the transducer, the one resonance frequency being determined by the fundamental oscillatory resonance of the transducer plate (3), and the other resonance frequency being determined by a Helmholtz resonator (7 and 8, C) arranged on the sound-radiating side of the transducer plate.

IPC 1-7
H04R 17/10; **H04M 1/00**

IPC 8 full level
H04M 1/00 (2006.01); **H04R 1/22** (2006.01); **H04R 17/10** (2006.01)

CPC (source: EP)
H04R 1/225 (2013.01); **H04R 17/10** (2013.01); **H04R 2499/11** (2013.01)

Citation (examination)
DE 1961217 C3 19780824

Cited by
US4413198A; DE3446183A1; WO8302364A1

Designated contracting state (EPC)
AT CH FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0025955 A1 19810401; **EP 0025955 B1 19850123**; AR 223549 A1 19810831; AT E11478 T1 19850215; AU 538420 B2 19840816; AU 6250980 A 19810409; BR 8005981 A 19810331; DE 2937922 A1 19810409; DE 2937922 C2 19881124; FI 74183 B 19870831; FI 74183 C 19871210; FI 802943 A 19810320; GR 70029 B 19820723; JP S5651200 A 19810508; ZA 805775 B 19810930

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