

Title (en)  
Musical instrument with a cylinder valve

Title (de)  
Musikinstrument mit Zylinderventil

Title (fr)  
Instrument de musique à barillet

Publication  
**EP 0383639 B1 19971001 (FR)**

Application  
**EP 90400026 A 19900104**

Priority  
FR 8902029 A 19890216

Abstract (en)  
[origin: EP0383639A1] The outlet hole (3) is axial and opens through one of the end faces of the shell forming the cylinder, whereas the outlet hole (5), the shunting hole (6) and the return hole (7) are radial and open through the lateral face of the shell. Trombone. <IMAGE>

IPC 1-7  
**G10D 7/10; G10D 9/04**

IPC 8 full level  
**G10D 7/10** (2006.01); **G10D 9/04** (2006.01)

CPC (source: EP KR US)  
**G10D 7/10** (2013.01 - EP KR US); **G10D 9/02** (2013.01 - KR); **G10D 9/04** (2013.01 - EP KR US)

Cited by  
FR3121258A1; FR2670312A1

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0383639 A1 19900822; EP 0383639 B1 19971001**; AT E158888 T1 19971015; DE 69031508 D1 19971106; DE 69031508 T2 19980326;  
FR 2643183 A1 19900817; FR 2643183 B1 19921204; JP H0339993 A 19910220; KR 900013452 A 19900905; US 4996902 A 19910305

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KR 900001855 A 19900215; US 46329390 A 19900110