

Title (en)  
Pressure pulse generator.

Title (de)  
Druckimpulsgenerator.

Title (fr)  
Générateur d'impulsions de pression.

Publication  
**EP 0140788 A2 19850508 (EN)**

Application  
**EP 84402124 A 19841023**

Priority  
US 54531383 A 19831024

Abstract (en)  
An improved acoustic signal generator has rotor and stator elements, each having a plurality of radially-extending lobes and intervening ports relatively positioned and configured to establish fluid dynamic forces that bias the generator into an open position, thereby imparting a <<stable open>> characteristic to the generator. The rotor is located downstream of the stator, and rotor lobes are outwardly tapered in the downstream direction and have underlap relative to the upstream stator lobes. The invention is especially suited for use in oil industry MWD operations to communicate downhole measurement data to a well surface during drilling. In one embodiment, undercuts on the rotor lobes impart a flutter action which clears debris.

IPC 1-7  
**E21B 47/12**

IPC 8 full level  
**E21B 47/18** (2012.01)

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**E21B 47/18** (2013.01); **E21B 47/20** (2020.05)

Cited by  
EP0448845A1; GB2626118A; GB2415977A; GB2415977B; EP0916807A3; US7330397B2; WO2006041308A3; US10465506B2; US6970398B2; US11499420B2; US9540926B2; US7327634B2; US10577927B2; US11753932B2; US8169854B2; US9238965B2; US10323511B2; WO2023051610A1

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