

Title (en)  
COMPACT RESONANCE DRIVE FOR EARTH-WORKING EQUIPMENT

Publication  
**EP 0039373 A3 19821201 (EN)**

Application  
**EP 80107644 A 19801204**

Priority  
US 14592180 A 19800502

Abstract (en)  
[origin: EP0039373A2] A mechanism for resonantly driving a moveable cutter blade located at the base of a concave tool is disclosed. An angulate beam has first and second legs meeting at a juncture at an included angle of less than 180 DEG . The beam includes a mounting flange which extends inwardly from the juncture between the legs. The beam has a resonant frequency, when restrained at the mounting flange, with a node at the juncture and first and second anti-nodes at the ends. One end of the beam receives a vibratory input or near the resonant frequency so that the second end vibrates about a neutral position. The mounting flange is attached to the tool so that the angulate beam conforms to the concave shape of the tool. The neutral position of the second end of the beam is spaced from the back of the cutter blade within striking distance of the blade. The input vibration at the first end of the beam causes the second end to vibrate about its neutral position and impart forward impulses to the cutter blade to drive the blade intermittently forward.

IPC 1-7  
**E02F 3/66**; B06B 3/00

IPC 8 full level  
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CPC (source: EP)  
**B06B 3/00** (2013.01); **E02F 3/401** (2013.01); **E02F 3/405** (2013.01)

Citation (search report)

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**EP 80107644 A 19801204**; AT 80107644 T 19801204; BR 8100552 A 19810130; CA 365842 A 19801201; DE 3071729 T 19801204; JP 6615481 A 19810430