

Title (en)
Improved oscillating hand tool

Title (de)
Verbessertes oszillierendes Handwerkzeug

Title (fr)
Outil vibrant portatif perfectionné

Publication
EP 0719616 A1 19960703 (EN)

Application
EP 95308370 A 19951122

Priority
GB 9426259 A 19941224

Abstract (en)

A dual function powered oscillating hand tool comprises (i) a drive unit (2) having an electric motor and a first drive shaft (6); (ii) an eccentric bearing (26) mounted on the first drive shaft (6) with a radial offset e relative to the first drive shaft (6); (iii) a second drive shaft (24) mounted on the eccentric bearing (26) and terminating in a flange (30) and a drive spigot (38); (iv) a sanding shoe (22); (v) a location hole (42) positioned on the backing face (46) of the sanding shoe (29) for location of the second drive shaft (24) and (vi) means (40,44) to restrict the random orbit of the sanding shoe (22) to a regular orbit. The drive spigot has a diameter d1 adjacent to the flange face and a maximum diameter d2 at its free end and the location hole (42) has a diameter d3 at the backing face (46) and a diameter d4 at the face adjacent to the working face of the shoe, and $d1 = d3 - c1$, $d2 = d4 - c2$ and $d2 = d3 - (2e - c1)$ where c1 is the clearance between the drive spigot (32) and the location hole (42) at the flange face when the shoe is mounted on the second drive shaft (24) and c2 is the clearance between the drive spigot (32) and the location hole (42) at the face of the location hole (42) adjacent to the working face when the shoe is mounted on the second drive shaft (24). <IMAGE>

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Citation (search report)
• [A] FR 2104073 A5 19720414 - BOSCH
• [A] EP 0525328 A1 19930203 - BOSCH GMBH ROBERT [DE]
• [A] DE 3805926 A1 19890907 - BOSCH GMBH ROBERT [DE]

Cited by
NL1030176C2; EP1674202A1; US7198559B2; WO2007043871A1; WO0071296A1

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