

Title (en)  
WORM-DRIVE POWER TONG

Title (de)  
KRAFTZANGE MIT SCHNECKENANTRIEB

Title (fr)  
CLÉS À COMMANDE HYDROPNEUMATIQUE À VIS SANS FIN

Publication  
**EP 3482035 A1 20190515 (EN)**

Application  
**EP 17853577 A 20170614**

Priority  
• US 201615273983 A 20160923  
• US 2017037500 W 20170614

Abstract (en)  
[origin: US2018087334A1] A tong for applying torque to a tubular and a method of using a tong, of which the tong includes a rotary ring defining an inner profile through which the tubular is received, the inner profile defining a plurality of pockets extending radially outward and a plurality of cam surfaces circumferentially between the plurality of pockets, and a plurality of engaging members disposed within the rotary ring. The plurality of engaging members are movable from a retracted position at least partially in the plurality of pockets to an engaging position in which the plurality of engaging members are positioned along the plurality of cam surfaces. The tong also includes a plurality of cam followers extending through the rotary ring, and a worm drive including a helical ridge. The plurality of cam followers engage the helical ridge so as to transmit a substantially tangential force to the rotary ring.

IPC 8 full level  
**E21B 19/16** (2006.01); **F16H 1/16** (2006.01)

CPC (source: EP US)  
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Designated contracting state (EPC)  
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Designated extension state (EPC)  
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