

Title (en)  
PNEUMATIC VICE WITH HYDRAULIC FORCE AMPLIFIER

Title (de)  
PNEUMATISCHER SCHRAUBSTOCK MIT HYDRAULISCHEM KRAFTVERSTÄRKER

Title (fr)  
ETAU PNEUMATIQUE AVEC AMPLIFICATEUR DE FORCE HYDRAULIQUE

Publication  
**EP 1333961 A1 20030813 (EN)**

Application  
**EP 00973341 A 20001109**

Priority  
SI 0000024 W 20001109

Abstract (en)  
[origin: WO0238340A1] The invention relates to a vise operated by compressed air as a transmitter of input pressure force and hydraulic oil as a means for amplifying same, with a respective assembly for amplifying the input pressure force residing within the area of a stationary vise jaw. According to the invention, a pneumatic/hydraulic assembly (4) as a unit for amplifying the input pressure force provides a pneumatic piston (16), whose power stroke is directed against the power stroke of a shiftable vise jaw (3), and a hydraulic piston (11), whose power stroke is synchronous and coinciding with the power stroke of said shiftable vise jaw (3). By a shaft piston (15) the force of the pneumatic piston (16) is conveyed into hydraulic oil. The pressure generated in hydraulic oil by said shaft piston (15) is conveyed onto a working area of the hydraulic piston (11). The force of the latter is the spanning force of said shiftable vise jaw (3).

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