

Title (en)
IMPROVED RATCHET WRENCH

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Application
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Priority
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Abstract (en)
[origin: WO8502574A1] An improved socket wrench (10), which has an aperture (48) extending entirely through the drive member (32) and drive portion (36) of the wrench to permit the wrench to be used on spark plugs or deep set bolts or nuts without the need for an extension or long sockets. A quick release mechanism having a member (130) is provided which includes a cylindrical portion (132) with depending resilient legs (134). A first embodiment provides the wrench (10) with a sliding ratcheting pawl (54). A second embodiment provides a wrench (160) with pivotal ratcheting pawls (186). A third embodiment provides a breaker bar wrench (260) with a quick socket release feature including a push button release feature (282, 288-290, 292). An improved socket wrench (300) is provided which includes a first pawl (318) sliding on a first slide surface (312) and a second pawl (320) sliding on a second slide surface (314). At least one of the slide surfaces is not perpendicular to a radial line (316) from the axis of rotation (27") of the drive member (302) intersecting the plane of the slide surface when the slide surface is least distant from the rotational axis. This provides an increase in the number of pawl engagements per revolution over that possible with only a single pawl. A square drive to hex drive adapter (380) and a hex drive to square drive adapter (400) are provided. Finally, a retainer spring (414) is used to frictionally engage sockets on a breaker bar (260).

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Cited by
US9757847B2; WO2016172007A1; US9956670B2; US10576611B2; US10688630B2; US11534895B2

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