

Title (en)
Electronic torque wrench.

Title (de)
Elektronischer Drehmomentschlüssel.

Title (fr)
Clé dynamométrique électronique.

Publication
EP 0172120 A1 19860219 (FR)

Application
EP 85420137 A 19850722

Priority
FR 8411917 A 19840723

Abstract (en)
[origin: US4669319A] A torque wrench according to the invention has a rigid elongated body having a tool end adapted to be rotationally fixed to a part to which a predetermined desired torque is to be applied and an opposite handle end. Transducers including strain gauges connected between the tool end and the body generate an actual-value output corresponding to the actual torque being applied by the wrench to the part rotationally coupled to the tool end. A display connected to the transducers reads out torque and an input device generates a desired-value output corresponding to the desired torque to be applied by the wrench to the part rotationally coupled to the tool end. A first comparator connected to the transducer and input device compares the actual-value and desired-value signals and generates an alarm signal when the actual torque is substantially the same as the desired torque. In accordance with this invention a second comparator compared the actual torque with a relatively low threshold torque. A switch circuit connected between the display on one side and the transducer and second comparators on the other side feeds the desired-value signal to the display when the actual torque lies below the relatively low threshold torque and alternately feeds the actual-value signal to the display when the actual torque exceeds the threshold torque.

Abstract (fr)
Cette clé dynamométrique comporte une tête d'entraînement (3) qui coopère avec l'élément à serrer et qui est liée à un corps allongé (il servant de poignée ainsi que de logement pour la partie électrique (12, 13). Le couple de serrage appliqué, déterminé au moyen d'un pont de mesure à jauges de contrainte (14), est comparé avec une valeur limite prescrite. Des moyens d'affichage numérique (6) indiquent alternativement le couple de serrage réel et la valeur limite. Des moyens de signalisation déclenchent une première alarme, par exemple sonore, lorsque le couple de serrage appliqué atteint une certaine fraction de la valeur limite, et une seconde alarme, par exemple lumineuse, lorsque le couple de serrage appliqué atteint exactement cette valeur limite.

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B25B 23/142

IPC 8 full level
B25B 23/142 (2006.01); **B25B 23/144** (2006.01)

CPC (source: EP US)
B25B 23/1425 (2013.01 - EP US)

Citation (search report)
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