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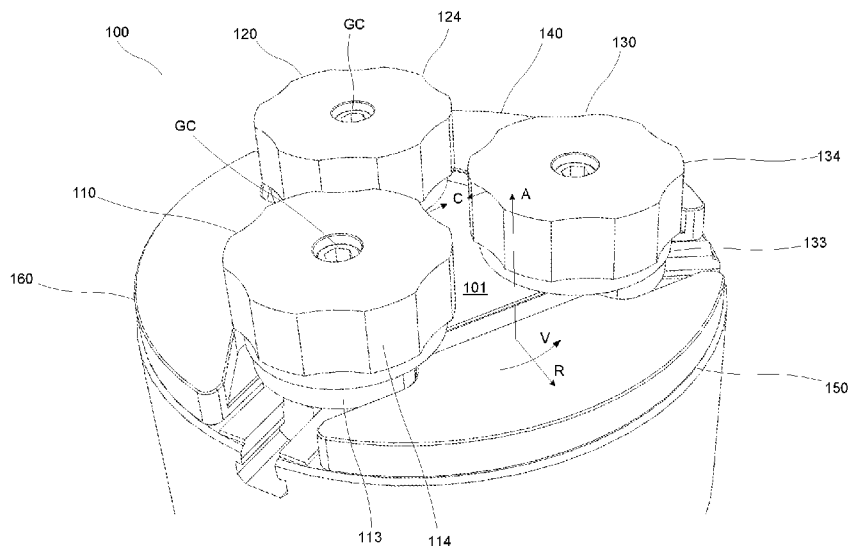
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- (71) Applicant: M.P.C.-SYSTEM AB [SE/SE]; P.O. Box 5879, 102 40 Stockholm (SE).
- (72) Inventor: SVENSSON, Bo Karl Ragnar; Nybrogatan 75 A, 114 40 Stockholm (SE).
- (74) Agent: NORÉNS PATENTBYRÅ AB; P.O. Box 10198, 100 55 Stockholm (SE).
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(54) Title: CHUCK ARRANGEMENT AND METHOD FOR FASTENING AND ROTATING A WORKPIECE USING SUCH CHUCK ARRANGEMENT HAVING COUNTERWEIGHTS CONNECTED TO THE CHUCK JAWS WHERE THE COUNTERWEIGHTS ARE SHAPED TO LIMIT RADIAL MOVEMENT OF THE CHUCK JAWS

Fig. 1



(57) Abstract: Chuck arrangement (100) associated with radial, axial and angular directions. The chuck arrangement comprises at least three chuck jaws (110, 120, 130), each arranged to, in an assembled state, be radially displaceable into a respective clamping position in which it applies a radial clamping force (C) to a held workpiece (W). Each chuck jaw comprises a respective chuck jaw fixing means arranged to radially fix the chuck jaw in said clamping position. The chuck arrangement further comprises one respective counterweight (140, 150, 160) associated with each of said chuck jaws and mechanically connected to the chuck jaw in question; and associated with a respective centre of gravity (GW) which in turn is arranged so that the counterweight, via centripetal forces developed by the coun-



WO 2020/162813 A8

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terweight in question, pulls the chuck jaw in a pull direction having a non-zero component radially towards a centre of rotation of the chuck arrangement as the chuck arrangement rotates. The invention is characterised in that a first and a second of the said counterweights are shaped so that, in said assembled state, they together form a respective radial support structure arranged to engage with a chuck jaw associated with a third one of said counterweights, and to limit the radial freedom of movement of this chuck jaw away from a centre of gravity of the said third counterweight. The invention also relates to a method.