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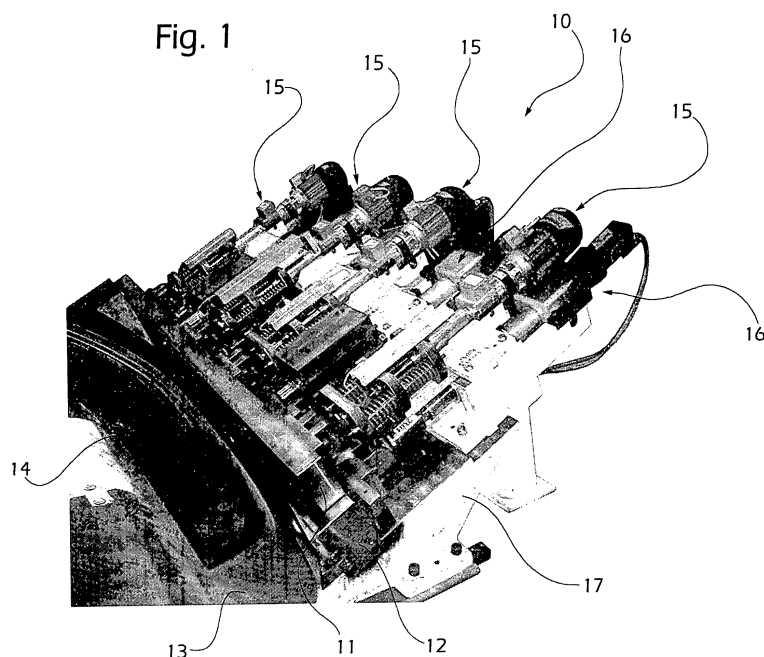
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### (54) Numeric control machine for the cold forming of sheet metal parts

(57) The machine (10) comprises a blankholder (11) and a tool (12) for applying a clamping force and a forming force, respectively, on the sheet metal part (13) to be worked, and a drive system (15, 16) for moving the blankholder (11) and the tool (12). The drive system includes: first and second electro-mechanical actuator devices (15, 16) for controlling the motion of the blankholder (11) and of the tool (12), respectively; sensor means

(34, 35, 36, 37) associated to the said first and second actuator devices (15, 16) for sensing the linear position thereof and/or the force applied thereby and for providing signals representative of the sensed measures; and a control unit (40) for receiving as input the signals coming from the said sensor means (34, 35, 36, 37) and for producing as output command signals for the actuator devices (15, 16) as a function of the said input signals, according to a closed loop control configuration.

Fig. 1





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# EUROPEAN SEARCH REPORT

Application Number  
EP 04 00 4429

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Place of search		Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 04 00 4429

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