

(54) Title of the invention : CUSTOMIZED LEAF SPRING MANUFACTURING DEVICE

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(57) Abstract :
 A customized leaf spring manufacturing device, comprising a housing 1 developed to be installed over a ground surface, a touch interactive display panel 2 mapped on the housing 1 is accessed by a user for providing input regarding dimension of a leaf spring suspension to be manufactured by the user, a chamber 3 stored with multiple leaf spring sheets arranged within the housing 1, an artificial intelligence-based imaging unit 5 installed within the housing 1 for capturing multiple surrounding images to determine dimensions of the leaf spring sheet, a cutting blade 6 arranged on ceiling of the housing 1 by means of a two-axis lead screw arrangement 7 in order to cut and shape the sheets and a motorized gripper 10 arranged on the lead screw arrangement 7 and integrated with an impact wrench 11 installed within the housing 1.

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