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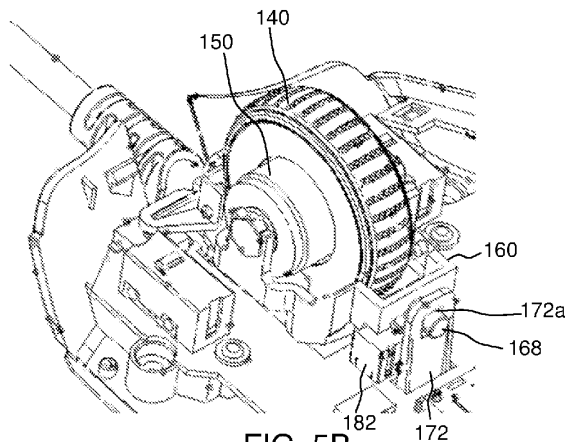


FIG. 5B

(57) Abstract: An input device including a housing, a ring-shaped scroll wheel, and an integrated haptic unit inserted through the scroll wheel. The integrated haptic unit includes a bridging structure and a variable motion-resistance component coupled thereto. The variable motion-resistance component having a cylindrical body rotatable relative to the bridging structure. The scroll wheel being fixedly attached to the cylindrical body in a coaxial manner. The variable motion-resistance component being configured to vary a motion-resistance profile against a relative rotation motion between the cylindrical body and the bridging structure for defining a haptic behavior of the scroll wheel. The integrated haptic unit includes an inbuilt encoder to convert relative motion between the cylindrical body and the bridging structure as an output signal. The integrated haptic unit being mounted to the housing in a manner so as to suspend the integrated haptic unit and the scroll wheel from a portion of the housing.

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