(57) Abrégé/Abstract:
The present invention relates to a measuring device (1) and a method for measuring the thickness of at least one layer (2) of a moving strip. The measuring device (1) comprises a transmitter body (4), which is axially movable within a transmitter housing (3)
and has a sensor head (5), projecting from the transmitter housing (3) and designed to rest against the layer via a gas cushion (2), and an upper portion (6), extending into a chamber (7) delimited within the transmitter housing (3). The transmitter housing (3) is provided with at least one port (9) for the supply of gas, which, in part, forms the said gas cushion and, in part, flows into the chamber (7). The measuring device is characterized in that the transmitter housing (3) is provided with a restrictor (10) for evacuating gas from the chamber (7). The method comprises the step of measuring the thickness of the layer (2) by means of a measuring device (1), the restrictor (10) being adjusted in such a way that the gas cushion exerts a pressure against the layer (2) equivalent to a weight of 0-65 g/cm².