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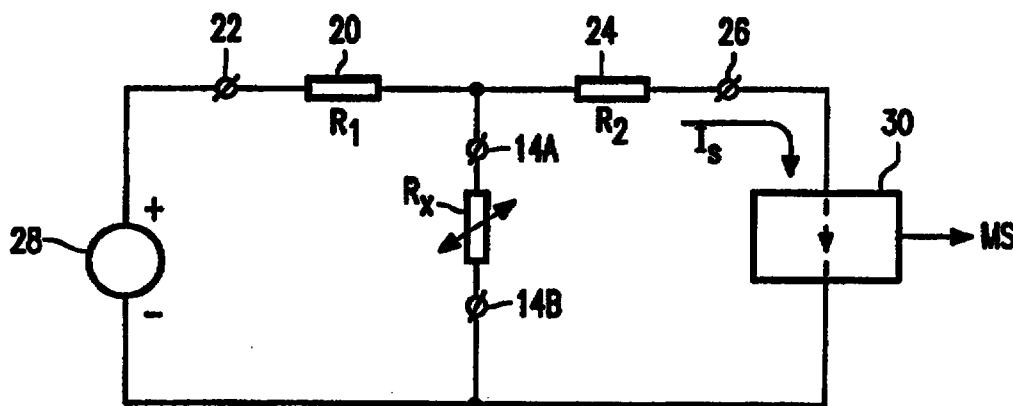
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(54) Title: HAIR-CARE APPLIANCE WITH HAIR-MOISTNESS MEASUREMENT BY MEASURING THE RESISTANCE OF THE HAIR, AND CIRCUIT FOR CONVERTING THE RESISTANCE VALUE OF A RESISTOR INTO A MEASUREMENT SIGNAL



(57) Abstract

A hair-care appliance measures the moistness of the hair by measuring the resistance (R_x) of the hair between measurement electrodes (14A/14B). The hair resistance (R_x) is included in a T network comprising a first resistor (20) driven by a voltage source (28) and a second resistor (24). The signal current (I_s) through the second resistor is measured and converted into a measurement signal (MS) by a converter (30). As a result of the use of the T network a comparatively large resistance variation of the hair resistance (R_x) is required for a given amplitude variation in the signal current (I_s). This allows measurements over a wider resistance range while the resolution is maintained.