

Title (en)

POSITION INDICATOR, MEASURING APPLIANCE, AND METHOD FOR PRODUCING AN INDICATOR PATTERN

Title (de)

STELLUNGSANZEIGE, MESSGERÄT UND VERFAHREN ZUR ERZEUGUNG EINER ANZEIGEMUSTERS

Title (fr)

INDICATEUR DE POSITION, APPAREIL DE MESURE ET PROCÉDÉ DE PRODUCTION D'UN MOTIF D'INDICATION

Publication

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Application

EP 03765028 A 20030717

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Abstract (en)

[origin: WO2004010084A2] The invention relates to a position indicator for indicating the relative position of two components which can be displaced in relation to each other. A first indicator pattern is applied to a first of the two components in a fixed manner, and a second indicator pattern is applied to a second of the two components in a fixed manner. The first indicator pattern extends in an extension direction over a first length L_1 and consists of a number N_1 of essentially identical first partial patterns which periodically repeat in the extension direction. The second indicator pattern extends in an extension direction over a second length L_2 and consists of a number N_2 of essentially identical second partial patterns which periodically repeat in the extension direction. According to the invention, the following equations hold true: $L_2 = L_1 \cdot (1 \pm 1/N_1)$ and $N_2 = N_1/n$ or $L_2 = L_1$ and $N_2 = N_1/n \pm 1$. The invention is characterised in that the first and/or second partial patterns have other indicator characteristics, enabling the relative position to be read more accurately, according to the accuracy of a vernier scale with an $(N_1/n) - 1$ to N_1/n graduation.

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