

## Title (en)

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

## Title (de)

STELLUNGSANZEIGE, MESSGERÄT UND VERFAHREN ZUR ERZEUGUNG EINES 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**

## Priority

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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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## IPC 8 full level

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