Title (en)
SHAPE SORTING

Title (de)
FORMENSORTIERUNG

Title (fr)
TRIAGE DE FORMES

Publication
EP 0536238 B1 19960508 (EN)

Application
EP 91912202 A 19910625

Priority
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Abstract (en)
[origin: WO9200149A1] In order to provide an accurate sort into many different classes, objects are passed through a viewing zone and viewed at the same instant by a number of viewers. Signals from the viewers are processed to provide signals representative of the maximum, minimum and mean of the blockiness and symmetry of the object, and the maximum and mean of the convex hull deviance of the object. The signals, together with an edge-breakthrough count are subjected to a linear transformation to provide a normalised shape parameter which is then assigned a value of 0 to 15, for each class being sorted, on the basis of the expected occurrence of the value of the parameter in that class. Each pair of secondary shape parameters so determined is used to derive a decision value from the table specific for that pair of secondary shape parameters. The shape class of the object is ascertained on the basis of a majority vote for all the shape decision values. The tables are 'learnt' by the machine by feeding a statistically significant number of samples representative of a number of shape classes through the machine.

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