

Title (en)
LASER-INScribed AND LASER-WELDED SHAPED BODIES AND PRODUCTION THEREOF

Title (de)
LASERBESCHRIFTETE UND LASERVERSCHWEIßTE FORMKÖRPER UND DEREN HERSTELLUNG

Title (fr)
CORPS MOULÉS À MARQUAGE LASER ET SOUDÉS AU LASER ET LEUR FABRICATION

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Application
EP 22728075 A 20220504

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Abstract (en)
[origin: WO2022238213A1] The present invention relates to shaped bodies comprising at least a first moulding and a second moulding, wherein the first moulding is at least partly transparent to NIR radiation, the second moulding absorbs NIR radiation in such a way that the first moulding and the second moulding are at least partly bonded to one another by laser transmission welding, wherein the first moulding has at least a subregion that is dark in colour and wherein at least a portion of the subregion has a light-coloured laser inscription, wherein the first moulding consists at least partly of a moulding compound comprising, based in each case on the total weight of the moulding compound, A) > 38.2% by weight to 99.98% by weight of a thermoplastic polymer or a mixture of thermoplastic polymers, B) 0.01% by weight to < 0.8% by weight of titanium dioxide particles having an average primary particle size in the range from 0.5 nm to 25 nm, C) 0.01% by weight to 1.0% by weight of one or more soluble dyes having an absorption in the NIR region that enables partial transparency for NIR radiation in the first moulding, and D) 0 to 60 percent by weight of further admixtures. The invention further relates to processes for producing the shaped body and to the use of a moulding compound as a moulding having a laser inscription in the production of a shaped body.

IPC 8 full level
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