

ABSTRACT

Plastics parts for energy chains with integrated sensors

5 The invention relates in general to energy chains (2), namely
chain parts, in particular chain link plates (11; 21; 31),
therefor and guiding parts (14) of a guide trough (3) for an
energy chain (2). The chain part (11; 21; 31) or guiding part
(14) comprises a formed part (22; 32) made from plastic, on
10 which a functional electric circuit (24; 34) with a sensor
function is arranged.

According to the invention, the functional circuit (24; 34; 44)
comprises at least one trace conductor structure (25; 35; 45),
15 which is formed on the formed part (22; 32) as the carrier of
the trace conductor structure (25; 35), e.g. is applied by an
additive manufacturing method.

(FIG. 2A and FIG. 4)