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**STAHR et al.**(10) **Pub. No.: US 2022/0377917 A1**(43) **Pub. Date: Nov. 24, 2022**(54) **COMPONENT CARRIER WITH MAGNETIC  
ELEMENT, MAGNETIC INLAY, AND  
MANUFACTURING METHOD****Publication Classification**(51) **Int. Cl.**  
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18, 2021.(57) **ABSTRACT**

A component carrier includes a stack having at least one electrically conductive layer structure and/or at least one electrically insulating layer structure and a magnetic element assembled to the stack. The magnetic element includes a magnetic matrix and an inductive element. The inductive element is at least partially enclosed by the magnetic matrix, so that an electric current flow direction through the inductive element is essentially in a horizontal direction with respect to the stack. Further, a magnetic inlay and a manufacturing method are described.

