



(12) **Patent Application Publication**  
Hsu

(43) **Pub. Date:** **Jun. 27, 2024**

CPC ..... ***H05K 3/4644*** (2013.01); ***H01F 17/0013***  
(2013.01); ***H01F 17/0033*** (2013.01); ***H05K***  
***1/165*** (2013.01); ***H05K 3/423*** (2013.01);  
***H05K 2201/086*** (2013.01)

## ABSTRACT

The invention provides a package carrier board and a manufacturing method thereof. The packaging carrier board includes a core layer, a magnetic element structure and a conductive connecting element. The core layer has a first surface and a second surface opposite to each other. The magnetic element structure includes a plurality of patterned magnetic conductive metal layers and a plurality of patterned conductive coil layers. The patterned magnetic conductive metal layers are stacked and embedded in the core layer, and each have at least one magnetic conductive metal, and part of these magnetic conductive metals form an array block. The patterned conductive coil layers are embedded in the core layer, and part of the patterned conductive coil layers are located on both sides of the array block. The conductive connecting element is arranged through the core layer and conducts the first surface and the second surface of the core layer.

(22) Filed: **Mar. 15, 2023**

(30) **Foreign Application Priority Data**

Dec. 23, 2022 (TW) ..... 111149707

### Publication Classification

<i>H05K 3/46</i>	(2006.01)
<i>H01F 17/00</i>	(2006.01)
<i>H05K 1/16</i>	(2006.01)
<i>H05K 3/42</i>	(2006.01)

