

Title (en)  
Air heat exchanger provided with a fan guard

Title (de)  
Luftwärmetauscher mit der Gebläseschutzvorrichtung

Title (fr)  
Échangeur de chaleur d'air pourvu d'une grille

Publication  
**EP 2829737 A1 20150128 (EN)**

Application  
**EP 13177596 A 20130723**

Priority  
EP 13177596 A 20130723

Abstract (en)  
A fan guard (4) for an air heat exchanger (2) and an air heat exchanger comprising such a fan guard is provided. The fan guard comprises a grid (8) arranged to enclose a fan (6) of the air heat exchanger and a first attachment means (18) arranged to engage with a second attachment means (38) of the air heat exchanger to attach the fan guard to the air heat exchanger. The second attachment means projects from a surface (44) of the air heat exchanger. The fan guard is characterized in that the first attachment means comprises a hook (22) having a first end (24) at which the hook is connected to the grid. The hook is arranged to just partially encircle the second attachment means to attach the fan guard to the air heat exchanger. The hook has an opening (36) enabling the hook to move into partial encirclement of the second attachment means when the fan guard is rotated in relation to the air heat exchanger, around a center axis (C) of the fan guard, in a first rotation direction (D1), and out of partial encirclement of the second attachment means when the fan guard is rotated in relation to the air heat exchanger, around the center axis of the fan guard, in a second rotation (D2) direction which is opposite to the first rotation direction.

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)  
• [A] JP 2000055410 A 20000225 - MITSUBISHI HEAVY IND LTD  
• [A] JP H09229421 A 19970905 - SANYO ELECTRIC CO  
• [A] JP H01189438 A 19890728 - MATSUSHITA SEIKO KK  
• [A] JP S63129230 A 19880601 - MATSUSHITA SEIKO KK  
• [A] US 5575622 A 19961119 - ZIMMERMAN LEON S [US], et al  
• [A] DE 102007017875 A1 20081016 - SEW EURODRIVE GMBH & CO [DE]

Cited by  
CN111271780A; CN108869413A; US11162692B2; CN106545983A; EP3163177A1; AU2016340532B2; CN111788453A; EP3715731A3; EP4235042A3; US9714773B2; US10612814B2; US10760818B2; US11079135B2; US11639812B2

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