

CLAIMS

[Claim 1] (Amended)

An air filter insert for filtering air having a block-like structure in which a filter sheet is pleated,
5 comprising:

a plurality of fold walls formed by folding the filter sheet; and

first projecting portions and second projecting portions formed by embossing the respective fold walls and aligned in
10 a fold line direction,

the first projecting portions arranged in a pair of adjacent fold walls and projected in directions of being closed to each other with top ends thereof abutted against each other, and

15 the second projecting portions being projected in the same direction without mutual interference.

[CLAIM 2]

The air filter insert according to claim 1, wherein the second projecting portions are arranged respectively at the
20 same positions in the fold line direction and are projected along the same direction.

[CLAIM 3]

The air filter insert according to claim 2, wherein a part of each of the second projecting portions, which are
25 arranged respectively in the fold walls, is positioned inside

the second projecting portion that is arranged in a fold wall adjacent to the fold wall.

[CLAIM 4]

5 The air filter insert according to claim 2, wherein the second projecting portions that project in one direction and the second projecting portions that project in the opposite direction are alternately aligned in the fold line direction.

[CLAIM 5]

10 The air filter insert according to claim 1, wherein the second projecting portions are projected so as not to make contact with each other.

[CLAIM 6]

15 The air filter insert according to claim 1, wherein the second projecting portions are shaped to extend perpendicularly toward a fold line in each of the fold walls.

[CLAIM 7]

20 The air filter insert according to claim 6, wherein at least one of a lateral cross-section and a longitudinal cross-section of the second projecting portions is trapezoidal.

[CLAIM 8]

The air filter insert according to claim 7, wherein both of the lateral cross-section and the longitudinal cross-section of the second projecting portions are trapezoidal.

25 [CLAIM 9]

The air filter insert according to claim 6, wherein a projecting height of the second projecting portions is approximately constant along a longitudinal direction thereof.

[CLAIM 10]

5 The air filter insert according to claim 1, wherein a top end face of the second projecting portions is a flat face that is parallel to the fold wall.

[CLAIM 11]

10 The air filter insert according to claim 1, wherein the first projecting portions extend perpendicularly toward a fold line in each fold wall and have an increasing projecting height in a longitudinal direction thereof.

[CLAIM 12]

15 The air filter insert according to claim 1, wherein the first and second projecting portions are alternately aligned along a fold line direction.

CLAIMS**[CLAIM 1]**

An air filter insert for filtering air having a block-like structure in which a filter sheet is pleated, comprising:

a plurality of fold walls formed by folding the filter sheet, first projecting portions and second projecting portions formed by embossing the respective fold walls and aligned in a fold line direction;

the first projecting portions arranged in a pair of adjacent fold walls being projected toward each other with top ends thereof abutted against each other;

the second projecting portions being projected so as not to abut on each other;

the second projecting portions being arranged respectively at the same positions along the fold line direction and are projected in the same direction;

a part of each of the second projecting portions, which are arranged respectively, in the fold walls, being positioned inside the second projecting portion that is arranged in a fold wall adjacent to the fold wall.

[CLAIM 2]

The air filter insert according to claim 1, wherein the second projecting portions that project in one direction and the second projecting portions that project in the opposite direction are alternately aligned in the fold line direction.

[CLAIM 3]

The air filter insert according to claim 1, wherein the second projecting portions are projected so as not to make contact with each other.

[CLAIM 4]

The air filter insert according to claim 1, wherein the

second projecting portions are shaped to extend perpendicularly toward a fold line in each of the fold walls.

[CLAIM 5]

The air filter insert according to claim 4, wherein at least one of a lateral cross-section and a longitudinal cross-section of the second projecting portions is trapezoidal.

[CLAIM 6]

The air filter insert according to claim 5, wherein both of the lateral cross-section and the longitudinal cross-section of the second projecting portions are trapezoidal.

[CLAIM 7]

The air filter insert according to claim 4, wherein a projecting height of the second projecting portions is approximately constant along a longitudinal direction thereof.

[CLAIM 8]

The air filter insert according to claim 1, wherein a top end face of the second projecting portions is a flat face that is parallel to the fold wall.

[CLAIM 9]

The air filter insert according to claim 1, wherein the first projecting portions extend perpendicularly toward a fold line in each fold wall and have an increasing projecting height in a longitudinal direction thereof.

[CLAIM 10]

The air filter insert according to claim 1, wherein the first and second projecting portions are alternately aligned along a fold line direction.