

Title (en)  
SIROCCO FAN AND AIR CONDITIONER USING THE SAME

Title (de)  
SIROCCO-LÜFTER UND DIESEN VERWENDENDE KLIMAAANLAGE

Title (fr)  
VENTILATEUR SIROCCO ET CLIMATISEUR L'UTILISANT

Publication  
**EP 2314880 B1 20130109 (EN)**

Application  
**EP 08791016 A 20080710**

Priority  
JP 2008062442 W 20080710

Abstract (en)  
[origin: EP2314880A1] To provide a sirocco fan configured to reduce a sound that is generated at a time when a predetermined amount of a blowing-out air volume is supplied, and an air-conditioning apparatus using the same. A sirocco fan 100 with respect to the present invention is characterized in that in the sirocco fan has a suction inlet 2a formed on an extension line of a rotation center of a fan 1 and on both side surfaces of a scroll casing 2, and in a case that a ventilation resistance in a air path 2c is defined as P[Pa], an amount of air sucked in from the suction inlet 2a is defined as Q[m<sup>3</sup>/min], a width in a direction of a rotation axis of the fan 1 is defined as L[mm], k is defined as a constant, a height of the scroll casing 2 is defined as H = 246k[mm], and P/Q is defined as a loss coefficient  $\frac{1}{4}[\text{Pa}/(\text{m}^3/\text{min})^2]$ , the equation:  $f(k^{\frac{3}{4}}) = 0.34947(k^{\frac{3}{4}})^2 - 1.0554(k^{\frac{3}{4}}) + 1.8$  is satisfied, and the inequality:  $0.75f(k^{\frac{3}{4}}) \leq L/H \leq f(k^{\frac{3}{4}})$  is satisfied within a range of  $0.1 \leq k^{\frac{3}{4}} \leq 0.4$ .

IPC 8 full level  
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CPC (source: EP)  
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