

Title (en)  
AIR INTRODUCTION SYSTEM AND METHOD FOR COOLING TOWERS

Title (de)  
LUFTEINFÜHRUNGSSYSTEM UND -VERFAHREN FÜR KÜHLTÜRME

Title (fr)  
SYSTÈME ET PROCÉDÉ D'INTRODUCTION D'AIR POUR TOURS DE REFROIDISSEMENT

Publication  
**EP 2635869 A2 20130911 (DE)**

Application  
**EP 11779385 A 20111102**

Priority  
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Abstract (en)  
[origin: WO2012059496A2] Disclosed are a system and a method for improving air flow through a cooling tower and reducing loss of barometric pressure therein caused by rain (13) in the rain zone (29, 13) of the cooling tower. Aerodynamic modules (25) are mounted on the lower edge (11) of the cooling tower shell (2) in order to deflect the downward-flowing air about the lower edge (11) of the tower shell (2) and into the rain zone (29, 13). The aerodynamic modules can be modularly mounted, can be replaced, and do not affect the statics of the tower shell. Aerodynamic modules can also be built on the base to deflect the incoming air over any obstacles. Gutters (40) or dripping elements (41) can also improve flow by reducing the rain falling in an outer area (29). The aerodynamic modules (25), gutters (40) and dripping elements (41) can be installed in or close to the intake region (10) of the air (10) in the cooling tower (1), where the air flow meets the cooling water. The increased air flow in the cooling tower (1) results in improved heat exchange between the air and the cooling water. Said improved cooling performance helps reduce primary energy consumption and increase the efficiency of the plant.

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