

Title (en)  
A NOZZLE RING STRUCTURE

Title (de)  
DÜSENRINGSTRUKTUR

Title (fr)  
STRUCTURE DE BAGUE DE BUSE

Publication  
**EP 3902982 A4 20220914 (EN)**

Application  
**EP 19903295 A 20191227**

Priority  
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• CN 2019129192 W 20191227

Abstract (en)  
[origin: WO2020135709A1] A nozzle ring structure, comprising a mounting disc (1), the mounting disc (1) is provided with a toggle disc (2) on one end face and a back cover (4) on the other end face, at least three positioning pins (5) are provided between the toggle disc (2) and the mounting disc (1), the mounting disc (1) is provided with blind holes (11), wherein the positioning pins (5) are received, at one end thereof, in the blind holes (11) and abut, at the other end thereof, against the toggle disc (2), and a spacer sleeve (3) is provided between the back cover (4) and the mounting disc(1). Thus, it reduces the contact area between the mounting disc and the toggle disc, reduces the probability of foreign matter entering into the contact surface there between, reduces the wear rate there between, and also allows flexible rotation and more stable and reliable movement for the toggle disc.

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Citation (search report)  
• [X] CN 108825362 A 20181116 - TIANJIN NORTH TIANLI TURBOCHARGING TECH CO LTD  
• [X] DE 102004023211 A1 20051208 - VOLKSWAGEN AG [DE]  
• [Y] CN 103104299 A 20130515 - BOSCH MAHLE TURBO SYSTEMS GMBH  
• [Y] CN 205908317 U 20170125 - PINGXIANG DEBO TECH DEV CO LTD  
• [A] CN 203067041 U 20130717 - HUNAN TYEN MACHINERY CO LTD  
• [A] EP 2239425 A2 20101013 - HONEYWELL INT INC [US]  
• [AP] EP 3530884 A1 20190828 - GARRETT TRANSP I INC [US]  
• See references of WO 2020135709A1

Designated contracting state (EPC)  
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**WO 2020135709 A1 20200702**; CN 209398456 U 20190917; EP 3902982 A1 20211103; EP 3902982 A4 20220914

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