

# Patent

This patent relates to an e-Axle mounted on a new type of BEV, as introduced in this technical report.

## 1. POWER TRANSMISSION DEVICE

(Fig. 1)

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 DEVICE  
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As a result, the stirring resistance of a shaft can be reduced as compared with a case in which the second shaft is immersed in the oil reservoir, and the stirring resistance of the shaft in the oil reservoir can be improved.

### 【SUMMARY OF THE INVENTION】

[Problem] The air breather chamber and the oil catch tank can restrict the arrangement of shafts in a power transmission device. This restriction may force shafts that do not necessarily need to be immersed in the oil reservoir to be submerged, potentially leading to increased stirring resistance.

[Solution] According to the present invention, an air breather chamber 10b is provided above and near the third shaft 23. An oil catch tank 10c, which reserves the oil raked up by the gear portion of the third shaft 23, is positioned above and near the first shaft 21. Furthermore, an oil guide 10d, located above the second shaft 22, introduces the oil raked up by the gear portion into the oil catch tank 10c. Crucially, the second shaft 22 is set at a position higher than the axes A1, A3 of both the first and third shafts 21, 23, and is disposed outside the oil reservoir within the case.

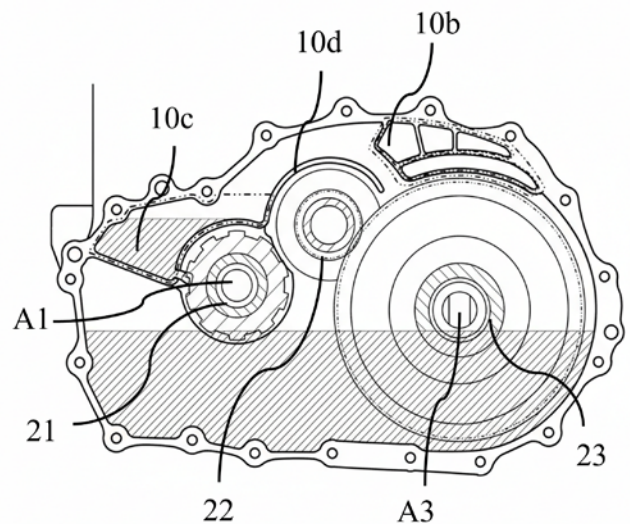


Fig. 1