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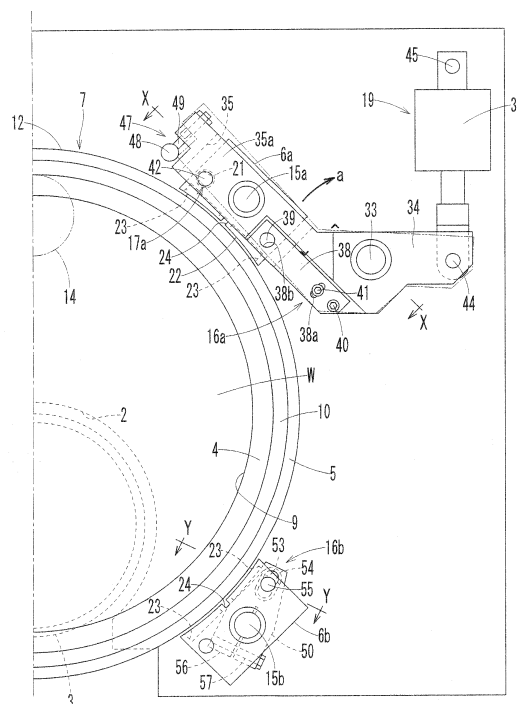
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(54) **Method for grinding thin sheet-like workpiece and double-end surface grinder**

(57) [Object] To reduce influences of external forces that are to be applied to a carrier ring and improve workpiece grinding precision, and maintain high grinding precision over a long period of time without problems such as wear, etc.

[Solution Means] In a double-end surface grinder that grinds both surfaces of a thin sheet-like workpiece W by a pair of grinding wheels 3 while rotating the workpiece W via a carrier 4 in a state where the workpiece W fitted to the carrier 4 is supported by static pressures of a pair of static pressure pads 1 in a non-contact manner, a plurality of static pressure carrier guides 6a and 6b that support a carrier ring 5 on the outer periphery of the carrier 4 by static pressures in a non-contact manner are provided in the circumferential direction. The carrier ring 5 has a cylindrical outer peripheral surface 12, and in proximity to the outer peripheral surface 12, static pressure carrier guides 6a and 6b are disposed at substantially even intervals. The static pressure carrier guides 6a and 6b may be fixed or floatable.

Fig. 3





EUROPEAN SEARCH REPORT

Application Number
EP 12 17 5279

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| The present search report has been drawn up for all claims | | | |
| Place of search Munich | | Date of completion of the search 21 November 2016 | Examiner Watson, Stephanie |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p> | | | |

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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