

**EUROPEAN PATENT APPLICATION**

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Applicant: **HUNTER VALLEY CONSTRUCTIONS PTY LIMITED, 25 Bolton Street, Newcastle New South Wales 2300 (AU)**

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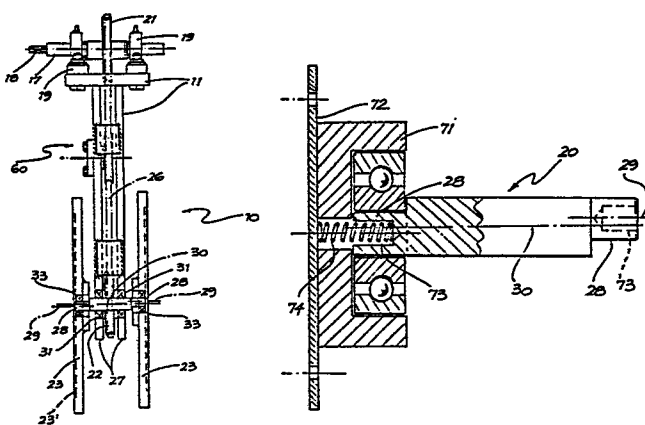
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Designated Contracting States: **AT BE CH DE FR GB IT LI LU NL SE**

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**Valve seat facing device.**

The present invention provides a device for lapping valve seats (16) of for example steam valves in a power generating station. The device includes means for providing torque to be applied to a crankshaft (20) which includes an eccentric shaft on (28) at least one of its extreme ends. Mounted on each eccentric shaft (28) by way of a loose fitting bearing (33) is a facing disc (23) which are interchangeable to allow different sizes and abrasive grades to be used. During operation the facing discs (23) are pressed towards their respective valve seats (16) being lapped by helical springs (74) held within counterbores (73) of each eccentric shaft (28) thus urging the discs (23) axially outwardly of the crankshaft (20). During rotation of the crankshaft (20) the discs (23) tend to orbit around the valve seat (16) being faced at a slow rate while moving substantially radially inwardly and outwardly at the rotational frequency of the crankshaft (20). The device therefor provides a relatively fast and accurate refacing operating to the valve seats (16) which may have been worn or scratched during use. Further the apparatus saves the valve having to be removed from its steam line and thus greatly reduces overall time involved in the operation.





DOCUMENTS CONSIDERED TO BE RELEVANT															
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>3</sup> )												
A	US-A-2 572 485 (HUNTER) * Column 2, line 51 - column 3, line 8; figure 1 * ---	1-3,7,9	B 24 B 15/02												
A	GB-A-1 235 789 (TAYLOR) * Page 2, lines 9-16, 28-51; figure 2 * ---	1,4,5													
A	US-A-2 942 388 (CROFT) * Column 3, lines 34-45; figure 1 * ---	1,6,7													
A	US-A-4 205 495 (GRIMSLEY) * Abstract; figure 1 * ---	2,3,7-9													
A	FR-A-2 483 831 (SANITAIRE ACCESSOIRES SERVICES) * Figure 1 * ---	10	TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> ) B 24 B												
A	GB-A- 724 239 (DEWRANCE & CO.) ---														
A	US-A-2 230 953 (INDGE) -----														
The present search report has been drawn up for all claims															
Place of search THE HAGUE		Date of completion of the search 10-01-1985	Examiner HUGGINS												
<table border="0"><tr><td>CATEGORY OF CITED DOCUMENTS</td><td>T : theory or principle underlying the invention</td></tr><tr><td>X : particularly relevant if taken alone</td><td>E : earlier patent document, but published on, or after the filing date</td></tr><tr><td>Y : particularly relevant if combined with another document of the same category</td><td>D : document cited in the application</td></tr><tr><td>A : technological background</td><td>L : document cited for other reasons</td></tr><tr><td>O : non-written disclosure</td><td>&amp; : member of the same patent family, corresponding document</td></tr><tr><td>P : intermediate document</td><td></td></tr></table>				CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention	X : particularly relevant if taken alone	E : earlier patent document, but published on, or after the filing date	Y : particularly relevant if combined with another document of the same category	D : document cited in the application	A : technological background	L : document cited for other reasons	O : non-written disclosure	& : member of the same patent family, corresponding document	P : intermediate document	
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