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EUROPEAN PATENT APPLICATION

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(71) Applicant: **Kabushiki Kaisha TOPCON**
Tokyo 174-0052 (JP)

(72) Inventors:
• **Eto, Yasuhito, Kabushiki Kaisha TOPCON**
Tokyo 174-0052 (JP)
• **Ogawa, Yoshimasa, Kabushiki Kaisha TOPCON**
Tokyo 174-0052 (JP)
• **Suzuki, Yasuo, Kabushiki Kaisha TOPCON**
Tokyo 174-0052 (JP)

(74) Representative: **Pfenning, Meinig & Partner**
Mozartstrasse 17
80336 München (DE)

(54) **Lens grinding apparatus and apparatus for treating grinding water for use therein**

(57) A grinding water treating apparatus for use in a lens grinding apparatus is provided which permits both grinding water treating means and deodorizing means to be accommodated in a limited receptacle space, thereby permitting reduction of the receptacle space. In a grinding water treating apparatus (27) for use in a lens grinding apparatus, comprising a grinding water treating means (27a) which filters grinding water after use in a glasses lens grinding work to separate grinding wastes and produce purified water and a deodorizing means (51) for removing an offensive smell developed within the grinding water treating means (27a) and also within a grinding water storage vessel (3), both grinding water treating means (27a) and deodorizing means (51)

are disposed within the same housing (40). Moreover, a lens grinding apparatus is provided having a grinding water storage vessel (3) for the storage of grinding water which has been used in grinding a glass-lens and a grinding water supply hose (19) which permits said grinding water to flow into said grinding water storage vessel, wherein, an injection means (N) is attached to a tip (19a) of said grinding water supply hose, and said grinding water is injected radially by said injection means to cover the surface of grinding water already stored in said grinding water storage vessel, thereby extinguishing foams produced on the surface of said grinding water.

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EUROPEAN SEARCH REPORT

Application Number
EP 03 09 0060

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.7)
X	DE 44 11 537 A (WERNICKE & CO GMBH) 12 October 1995 (1995-10-12)	1-3	B24B9/14 B24B55/02 B24B55/06
Y	* column 2, line 31-58; figures *	4-6	
Y	DE 44 26 419 C (WERNICKE & CO GMBH) 4 April 1996 (1996-04-04) * column 1, line 23-57 * * column 3, line 51 - column 4, line 1 * * figures 1,4,5 *	4-6	
Y	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 02, 29 February 2000 (2000-02-29) -& JP 11 320408 A (TOPCON CORP), 24 November 1999 (1999-11-24) * abstract; figure 1 *	4-6	
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 598 (M-1704), 15 November 1994 (1994-11-15) -& JP 06 226629 A (NIKON CORP), 16 August 1994 (1994-08-16) * abstract *	1-3	
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 19, 5 June 2001 (2001-06-05) -& JP 2001 038623 A (TOPCON CORP), 13 February 2001 (2001-02-13) * abstract *	1-3	
A	EP 1 043 121 A (TOPCON CORP ;KITO IND CO LTD (JP)) 11 October 2000 (2000-10-11) * figure 1 *	1-3	
X	DE 43 36 824 A (DUERR DENTAL GMBH CO KG) 4 May 1995 (1995-05-04) * column 3, line 13-28; figure 1 *	7	
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 25 August 2003	Examiner Gelder, K
CATEGORY OF CITED DOCUMENTS 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 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			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 03 09 0060

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-6

A grinding water treating apparatus for use in a lens grinding apparatus, having grinding water treating means and deodorizing means arranged within one and the same housing.

2. Claim : 7

A lens grinding apparatus having a grinding water storage vessel and a grinding water supply hose which permits grinding water to flow into said vessel, and injection means attached to a tip of said hose for injecting said grinding water radially so as to extinguish foam produced on the surface of the stored grinding water.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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25-08-2003

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82