

Title (en)  
Cup attaching apparatus

Title (de)  
Vorrichtung zum Anbringen eines Halteteils

Title (fr)  
Appareil de glantage pour lentilles

Publication  
**EP 0933163 B2 20120118 (EN)**

Application  
**EP 99101573 A 19990129**

Priority  

- JP 3403598 A 19980130
- JP 24621398 A 19980831

Abstract (en)  
[origin: EP0933163A1] In a cup attaching apparatus, a cup (6) is attached as a processing jig to a subject lens (5) along a reference axis (L), the lens (5) and an index plate (14) having an index of a predetermined pattern are illuminated by substantially parallel rays of light shaped into a diameter larger than a diameter of the lens (5) so that an image of the lens (5) and an image of the index are projected onto a screen (2), and the index image projected onto the screen (2) is detected, whereas an entire image of the lens projected onto the screen (2) is picked up. An optical center of the lens (5) with respect to the reference axis (L) is obtained on the basis of the index image detected by said detecting means, thereby displaying in a superposed manner alignment information indicating a relative position of the optical center with respect to the reference axis (L) and the image thus picked up. The alignment is effected while observing the displayed information. <IMAGE>

IPC 8 full level  
**B24B 13/005** (2006.01)

CPC (source: EP)  
**B24B 13/005** (2013.01)

Citation (opposition)

Opponent :

- EP 0363281 A2 19900411 - TOPCON CORP [JP]
- JP H0360960 A 19910315 - NIKON CORP
- JP H0679600 A 19940322 - HOYA CORP
- EP 0206860 A1 19861230 - BRIOT INT [FR]
- EP 0601742 A1 19940615 - COBURN OPTICAL IND [US]
- EP 0601395 A1 19940615 - NAT OPTRONICS INC [US]
- US 3880525 A 19750429 - JOHNSON JOHN R
- US 4779979 A 19881025 - IWANE TORU [JP]
- EP 0756166 A2 19970129 - NIDEK KK [JP]
- DE 19758338 A1 19980625 - TOPCON CORP [JP]
- EP 0426551 A2 19910508 - TOPCON CORP [JP]

Cited by  
FR2854268A1; CN105666281A; EP1201360A3; CN109154556A; EP1080835A3; EP1149664A3; EP3165341A1; CN106896532A; EP1974858A1; US6599171B2; US6798501B1; US6379215B1; US6481095B1; US8506354B2; EP1201360A2; US6722944B2

Designated contracting state (EPC)  
DE ES FR GB

DOCDB simple family (publication)  
**EP 0933163 A1 19990804; EP 0933163 B1 20040929; EP 0933163 B2 20120118; DE 69920542 D1 20041104; DE 69920542 T2 20051117;**  
DE 69920542 T3 20120524; ES 2230750 T3 20050501; ES 2230750 T5 20120521

DOCDB simple family (application)  
**EP 99101573 A 19990129;** DE 69920542 T 19990129; ES 99101573 T 19990129