



EUROPEAN PATENT APPLICATION

 Application number: 84104633.7

 Int. Cl.⁴: **F 02 B 77/02**
F 02 B 79/00

 Date of filing: 25.04.84

 Priority: 16.05.83 IT 6754083

 Date of publication of application:
 28.11.84 Bulletin 84/48

 Date of deferred publication of search report: 18.12.85

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

 Applicant: GILARDINI S.p.A.
 Corso Galileo Ferraris, 24
 I-10121 Torino(IT)

 Inventor: Filomeni, Paolo
 Via Orsiera 30
 I-10100 Torino(IT)

 Representative: Prato, Roberto et al,
 c/o Ingg. Carlo e Mario Torta Via Viotti 9
 I-10121 Torino(IT)

 **Mechanical element for the combustion chamber of a diesel engine of the type comprising sliding surfaces having wear protective layers for the running-in phase, and method for obtaining these layers.**

 A mechanical component (1), in particular for the combustion chamber of a diesel engine, having at least one sliding surface (2, 2a) coated with a wear-protective layer (4) which can be worn away during a running-in period and constituted by a nitride based heat diffusion layer nitrides with a percentage content by weight of nitrogen lying between about 4% and about 12%, which layer is obtained by a gaseous nitriding with ammonia or ionised nitrogen at temperatures less than or equal to about 600°C.

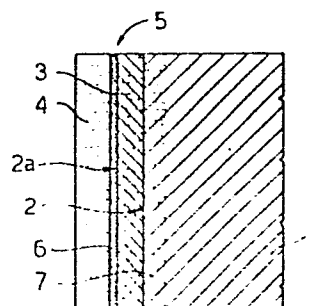


Fig.1



European Patent
Office

EUROPEAN SEARCH REPORT

0126323
Application number

EP 84 10 4633

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. 3)
X	MTZ, vol. 18, no. 9, September 1957, pages 280-283, Stuttgart, DE; Dr. Ing. H.H. BERG: "Echte Einlaufschichten"	1,2,9	F 02 B 77/02 F 02 B 79/00 F 16 J 9/00
A	--- ZEITSCHRIFT FÜR METALLKUNDE, vol. 73, no. 6, June 1982, pages 349-353, Stuttgart, DE; K.-T. RIE et al.: "Plasmanitrieren von Eisenwerkstoffen in kohlenstoffhaltigen Gasgemischen"	1,4,9,6	
A	--- HTM, vol. 29, no. 1, March 1974, pages 42-49, Stuttgart, DE; J. WÜNNING: "Neues Verfahren und Anlagen zum Nitrieren mit E-Verbindungsschicht"	1,9	
A	--- US-A-4 074 671 (PENNILA) * Abstract *	6	
A	--- GB-A-1 000 288 (GOETZE) * Whole document *	1,8	F 02 B 77/02 F 02 B 79/00
A	--- FR-A-2 518 209 (AE) * Pages 12,13 * -----	1,3,8	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 03-09-1985	Examiner WASSENAAR G.
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	

