

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 82302021.9

(51) Int. Cl.³: **C 22 C 16/00**

(22) Date of filing: 20.04.82

(30) Priority: 20.04.81 AR 285018

(43) Date of publication of application:
01.12.82 Bulletin 82/48

(88) Date of deferred publication of search report: 12.01.83

(84) Designated Contracting States:
DE FR GB

(71) Applicant: INVAP SOCIEDAD DEL ESTADO
Elordi Street 31
San Carlos de Bariloche Río Negro(AR)

(72) Inventor: Peretti Hollemaert, Hernán Américo
Centro Atómico Bariloche
8400 San Carlos de Bariloche Río Negro(AR)

(72) Inventor: Bolcich, Juan Carlos
Centro Atómico Bariloche
8400 San Carlos de Bariloche Río Negro(AR)

(72) Inventor: Ahlers, Manfred H.F.P. Centro Atómico
Bariloche
8400 San Carlos de Bariloche
Río Negro(AR)

(74) Representative: Ellis, John Clifford Holgate et al,
MEWBURN ELLIS & CO. 2/3 Cursitor Street
London EC4A 1BQ(GB)

(54) Zirconium based alloy.

(57) A Zr based alloy with 7-15% by weight Nb and 0.5-3% by weight Al can be quenched in water from 1000°C to largely retain beta phase. It is then deformable at room temperature to produce martensite.

The alloy, which can be made in an electric arc furnace and forged at 900°C to destroy the original solidification structure, is particularly suitable for structural components and fuel elements of nuclear reactors.



European Patent
Office

EUROPEAN SEARCH REPORT

0065816

Application number

EP 82 30 2021

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)
A	GB-A- 813 124 (THE UNITED KINGDOM ATOMIC ENERGY AUTHORITY) *Claims 1-6,9,11*	1-4	C 22 C 16/00
A	GB-A- 783 646 (THE UNITED KINGDOM ATOMIC ENERGY AUTHORITY) *Claims 1,2*	1	
A	US-A-3 341 373 (E.W.EVANS) *Claim 1*	4	
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			C 22 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 07-10-1982	Examiner RIES R
<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</p> <p>& : member of the same patent family, corresponding document</p>			