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(54) **A cored-wire for injecting into a steel melt and process of treating a steel melt using said wire**

(57) A wire for injecting into a steel melt in an injection direction, the wire comprising a metallic tubular shell enclosing a core, the core comprising calcium or a calcium containing compound, wherein the core also comprises a distribution enhancing compound for distributing the calcium or calcium containing compound in the steel melt in a direction substantially perpendicular to the injection direction wherein the distribution enhancing compound comprises a compound having a vapour pressure which is higher than the vapour pressure of calcium at liquid steel temperatures for obtaining a more homogeneous distribution of the calcium or calcium containing compound in the steel melt. The invention also relates to a process of treating a steel melt using said wire, the use of said wire and the resulting continuously cast steel product.

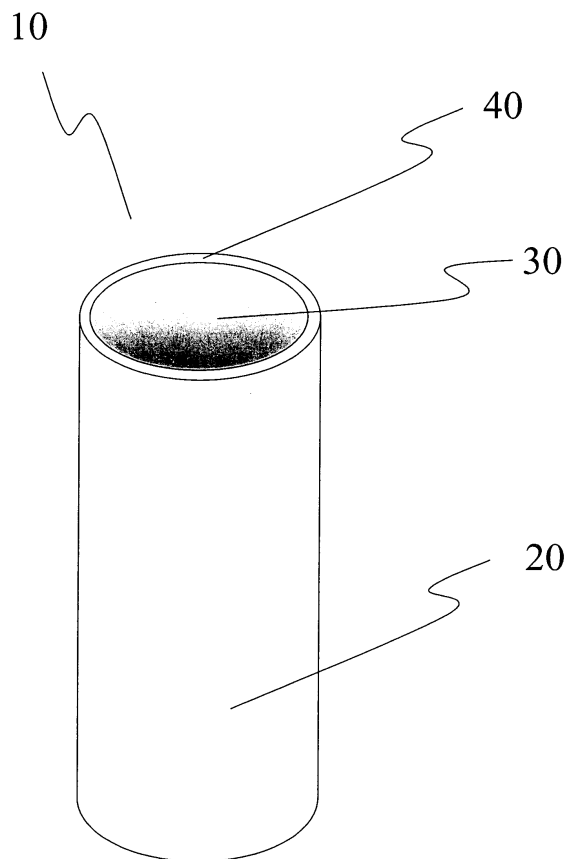


Figure 1

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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 24 21 743 A1 (OTOTANI, TOHEI, SENDAI) 20 November 1975 (1975-11-20)	1-4,6-10	INV. C21C7/00
Y	* page 1, paragraph 1 - paragraph 2 * * page 2, last paragraph * * page 3, last paragraph - page 5, paragraph 2 * * claims 1-3,6,7; example 2 *	11	
X	US 4 094 666 A (OTOTANI ET AL) 13 June 1978 (1978-06-13) * column 2, line 60 - column 3, line 42 * * examples 7,9 *	1-3,5-9	
X	US 6 685 763 B1 (BERTRAND FLORENCE ET AL) 3 February 2004 (2004-02-03)	10	
Y	* column 2, line 4 - line 61 * * column 3, line 47 - line 65 * * column 5, line 10 - column 6, line 2 * * claims *	11	
			TECHNICAL FIELDS SEARCHED (IPC)
			C21C
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 9 July 2007	Examiner Ceulemans, Judy
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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The members are as contained in the European Patent Office EDP file on
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09-07-2007

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 2421743	A1	20-11-1975	NONE	

US 4094666	A	13-06-1978	CA 1092830 A1	06-01-1981
			DE 2738379 A1	30-11-1978
			FR 2392120 A1	22-12-1978
			GB 1585278 A	25-02-1981

US 6685763	B1	03-02-2004	AT 231758 T	15-02-2003
			AU 3661700 A	02-11-2000
			BR 0009724 A	02-01-2002
			CA 2370437 A1	26-10-2000
			DE 60001320 D1	06-03-2003
			DE 60001320 T2	22-01-2004
			EP 1194255 A1	10-04-2002
			ES 2191615 T3	16-09-2003
			WO 0062957 A1	26-10-2000
			FR 2792234 A1	20-10-2000
			JP 2002542034 T	10-12-2002

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