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02.11.89 Bulletin 89/44(71) Applicant: **HAZELETT STRIP-CASTING
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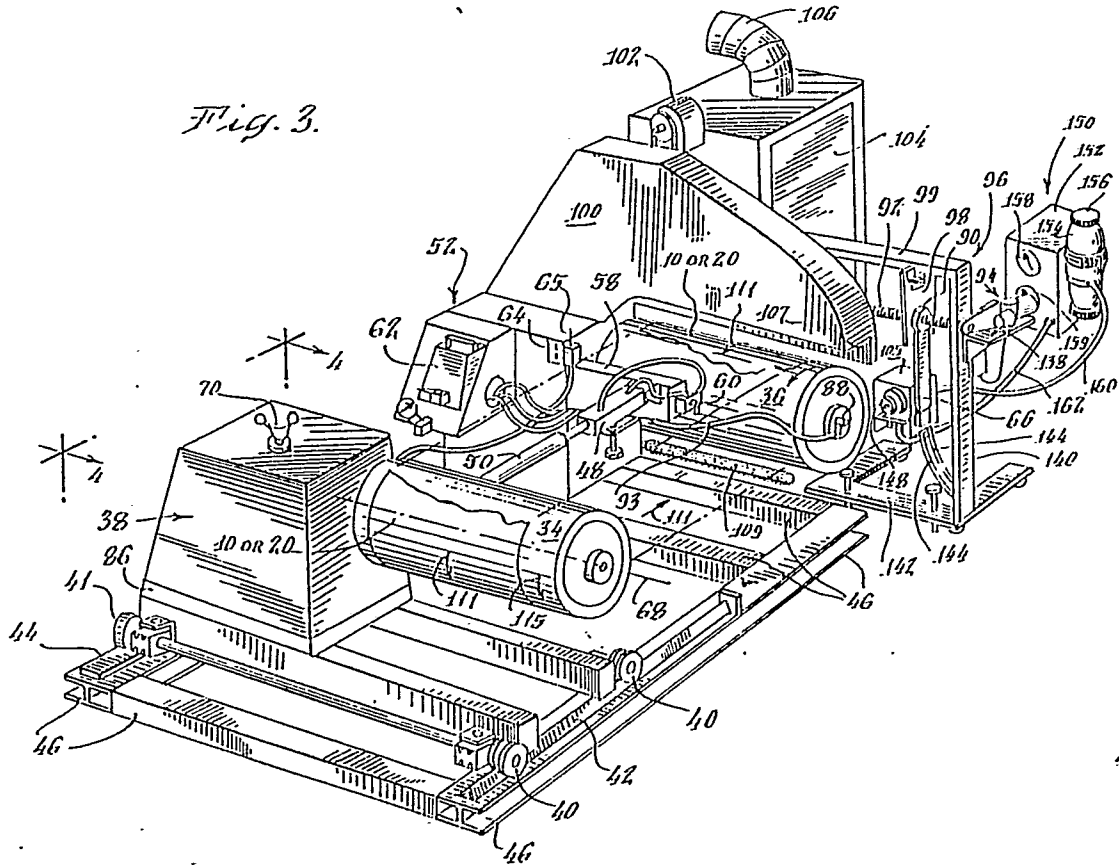
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D-8000 München 86(DE)**(54) **Apparatus for making matrix coatings.**

(57) An apparatus for making fusion-bonded matrix coatings on endless, flexible metallic casting belts for continuous casting machines is described. The fusion-bonded matrix coating comprises a nonmetallic refractory material interspersed substantially uniformly throughout a matrix of heat-resistant metal or metal alloy, for example nickel or nickel alloy. The coating is applied to a revolving belt (10,20) being supported and driven by pulleys (34,36) in a machine by thermally spraying a powdered mixture directly onto the roughened casting surface of the belt. The machine holds the revolving belt under tension and applies cooling to the rear surface of the revolving belt (10,12) opposite to the region where the thermal spray gun (66) is applying the coating to

the belt (10,20), and causes the thermal spray gun (66) to traverse uniformly transversely across the belt. The result is to insulate and protect the underlying belt from intimate molten metal contact. The life of the coated belts is dramatically increased, and the surface quality and properties of the cast product are significantly improved.

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DOCUMENTS CONSIDERED TO BE RELEVANT			EP 88111414.4
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
Y	<u>DE - A1 - 2 511 839</u> (SCHWEIZERISCHE ALUMINIUM AG) * Fig. 3; page 9, line 5 - page 10 * --	1	B 05 B 7/20 C 23 C 4/14 B 22 D 11/06 B 05 B 13/04
Y	<u>EP - A1 - 0 092 844</u> (HAZELETT STRIP-CASTING CORP.) * Fig. 1,2; page 15, line 17 - page 18, line 16 * --	1	
A	<u>AT - B - 336 827</u> (METALLGESELLSCHAFT AG) * Totality * --	1	
A	<u>DE - A1 - 2 510 041</u> (METALLURGIE HOBOKEN-OVERPELT) * Claim 4 * --	1	
D,A	<u>US - A - 2 904 860</u> (HAZELETT, HAZELETT, BLACKFORD) * Column 3, lines 26-50 * --	1	TECHNICAL FIELDS SEARCHED (Int. Cl. 4, B 05 B B 05 D B 22 D C 23 C
D,A	<u>US - A - 4 298 053</u> (DOMPAS et al.) * Totality * --	1	
A	<u>DE - A - 2 353 853</u> (TAMIC INTERNATIONAL PROP. LTD) * Claims * --	1	
D,A	<u>US - A - 3 871 905</u> (PETRY) * Totality * REFUND: 25 % ----	1	
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 24-08-1989	Examiner SCHÜTZ
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			