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(71) Applicant: **INDUCTALLOY CORPORATION**  
5429 West Roosevelt Road  
Chicago Illinois 60650(US)

(72) Inventor: **Feder, Darryl**  
3134 Maple Leaf Drive  
Glenview Illinois 60025(US)

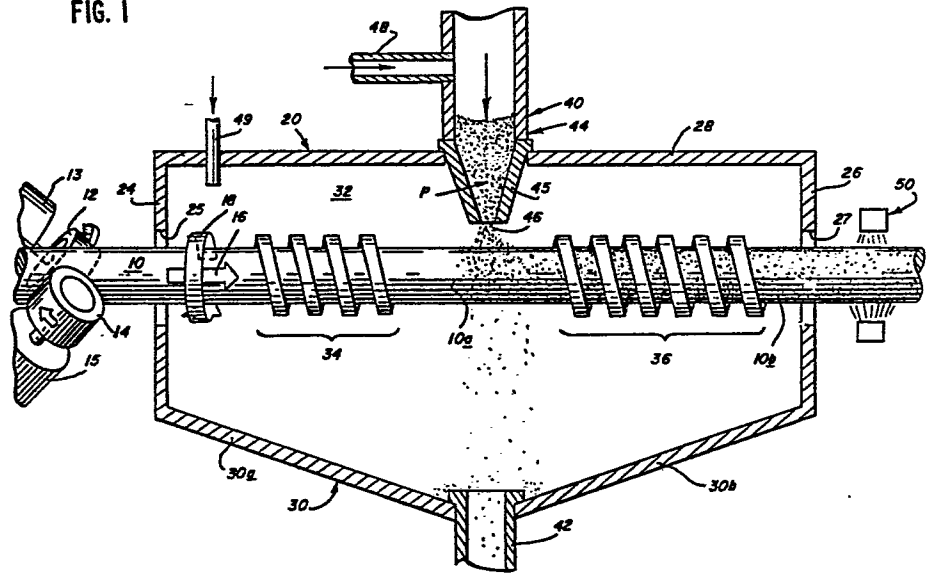
(74) Representative: **Bowman, Paul Alan et al,**  
**LLOYD WISE, TREGEAR & CO.** Norman House 105-109  
Strand  
London WC2R OAE(GB)

(54) Apparatus for and method of metalizing metal bodies.

(57) An apparatus and method for metalizing the surface of metal bodies, such as bars, rods and tubes is providing using a substantially enclosed chamber (32) in which the metalizing is caused to occur. An elongated body (10) to be metalized is moved axially into the chamber through an entrance opening while the body is simultaneously rotated, and then passes through a first induction heating coil (34) to pre-heat a portion of the body surface to a selected pre-heat temperature. The pre-heated portion is then advanced past the pre-heating coil to a point where it is subjected to , and bathed by, a flowing stream of metalizing powder entrained within a heated non-oxidizing gas, such as nitrogen, with the flowing stream directed against the pre-heated body portion so that the entrained metalizing powder impinges against and clings to and covers the entire surface of the pre-heated portion. The pre-heated body portion with metalizing powder clinging thereto then moves through a second induction heating coil (36) which heats the body and metalizing powder to a fusing temperature greater than the preheat temperature, so as to fuse the metalizing powder to the body. The interior of the chamber is filled with the non-oxidizing gas to prevent entry of air. The moving body with fused metalized surface thereon then exits from the chamber and is arranged to pass through a water quenching station (50) which quenches and cools the metalized body.

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FIG. 1





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. <sup>3</sup> )
A	GB-A-1 499 978 (THE GLACIER METAL)		C 23 C 1/00
A	US-A-3 436 244 (A.G. YOKAWONIS)		
A	GB-A-1 177 729 (F. MAAK)		
A	US-A-2 803 559 (W. RUTHERFURD)		
A	DE-A-1 929 153 (F. HECK)		
			TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )
			C 23 C 1/00 C 23 C 17/00
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12-12-1983	Examiner DEVISME F.R.
<b>CATEGORY OF CITED DOCUMENTS</b>			
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	