

Title (en)
PROCESS AND DEVICE FOR APPLYING A PROTECTIVE COATING ONTO A STEEL TUBE

Publication
EP 0429147 A3 19911016 (DE)

Application
EP 90250238 A 19900917

Priority
• DE 3931822 A 19890920
• DE 4028198 A 19900903

Abstract (en)
[origin: EP0429147A2] The invention relates to a process for applying a protective layer which is resistant to chemical and mechanical attack to a steel pipe, the pipe material first being galvanised and chromated and then being provided with a plastic coating in a continuous procedure by means of electrostatic powder coating, baking or curing and then being cooled, and the electrostatic powder coating, baking or curing and cooling being carried out while the pipe material is transported without support in this zone. In order to provide an improved process for the application of a protective layer to a steel pipe, by means of which extremely flexible and compressible protective layers can be produced and with which alternatively individual pipes or a continuous pipe train can be coated, it is proposed to connect to one another, before entry into the treatment station for coating with plastic, the individual pipes provided on the outer surface with a zinc and chromate layer by the electrochemical method, and to drive the resulting pipe train through the plant at a speed adjusted to the pipe dimension and, after coating of the pipes with a powder coating known per se, to fuse on or bake the layer at a temperature in the range from 250 to 350 degrees Celsius and to carry out the directly subsequent curing at a temperature lower than the baking temperature and during a minimum residence time of 10 seconds, and finally to quench the pipe train with water in a known manner. <IMAGE>

IPC 1-7
B05D 7/14; **B05D 1/06**; **B05D 3/02**; **C25D 3/04**; **C25D 3/22**; **C25D 7/04**; **C25D 17/06**; **B05B 5/14**

IPC 8 full level
B05D 1/06 (2006.01); **B05D 3/02** (2006.01)

CPC (source: EP)
B05D 3/0209 (2013.01); **B05D 7/146** (2013.01); **B05D 1/002** (2013.01); **B05D 1/06** (2013.01); **B05D 3/0254** (2013.01); **B05D 2350/20** (2013.01); **B05D 2350/65** (2013.01)

Citation (search report)
• [YD] DE 2616292 A1 19770224 - ALLIED TUBE & CONDUIT CORP
• [Y] GB 1456415 A 19761124 - URAL NII TRUBNOI PROMY
• [A] FR 2344612 A1 19771014 - SEKISUI CHEMICAL CO LTD [JP], et al
• [A] EP 0003369 A1 19790808 - VER BUIZENFAB [NL]
• [A] EP 0137663 A1 19850417 - SHAW IND LTD [CA]

Cited by
CN115247250A; CN109107850A; FR3041888A1; CN113996459A; DE102008048974A1; DE102008048974B4; US8038829B2

Designated contracting state (EPC)
AT DE ES FR GB IT SE

DOCDB simple family (publication)
DE 4028198 A1 19910328; **DE 4028198 C2 19930506**; EP 0429147 A2 19910529; EP 0429147 A3 19911016

DOCDB simple family (application)
DE 4028198 A 19900903; EP 90250238 A 19900917