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(54) Composition and method for simultaneously removing iron and copper scales from ferrous metal surfaces.

(57) Compositions for simultaneously removing iron and copper scales from ferrous metal surfaces comprise water, one or more organic chelating acids which dissolve iron, one or more reducing agents selected from erythorbic acid, alkali metal salts of erythorbic acid, and ammonium salts of erythorbic acid, and, as copper complexing compound, thourea and/or hexahydropyrimidine-2-thione. The compositions are utilized by contacting scale-containing ferrous metal surfaces therewith at temperatures of from about 75°F (24°C) to about 150°F (66°C).

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EUROPEAN SEARCH REPORT

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EP 83 30 4969

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. 9)
Y	US-A-3 803 042 (J.A. KNOX) * Claims 1-9,11,12,16,18,19,23,24; column 6, lines 37-46; example III; columns 12-13, in particular sol. no. 15 *	1-10	C 23 G 1/08
Y	--- CHEMICAL ABSTRACTS, vol. 78, no. 16, 23rd April 1973, page 223, no. 100930g, Columbus, Ohio, US; & JP - A - 72 25 078 (TOKYO SHIBAURA ELECTRIC CO., LTD.) 19-10-1972	1-10	
Y	--- CHEMICAL ABSTRACTS, vol. 84, no. 4, 1st January 1976, page 262, no. 21059a, Columbus, Ohio, US; & JP - A - 75 33 933 (KURITA WATER INDUSTRIES, LTD.) 02-04-1975	1,6,8-10	TECHNICAL FIELDS SEARCHED (Int. Cl. 9)
A	--- DE-A-2 457 235 (P. VODICKA)		C 23 G 1/00
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The present search report has been drawn up for all claims			
Place of search THE HAGUE	Date of completion of the search 13-05-1985	Examiner TORFS F.M.G.	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date		
A : technological background	D : document cited in the application		
O : non-written disclosure	L : document cited for other reasons		
P : intermediate document	& : member of the same patent family, corresponding document		