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54 **Corrosion inhibition of metals in water systems using organic phosphorous derivatives containing carboxyl groups.**

57 The inhibition of metal corrosion in water systems by an organic phosphonocarboxylic and/or phosphinocarboxylic acid compound is improved by using in combination therewith a manganese compound capable of providing a manganese ion. The manganese may be in the chelated form with the phosphono- or phosphinocarboxylic compound.



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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 (Int. Cl. 4)
D, Y	US-A-4 606 890 (P.R. FISK) * Claim 1; table 1; column 4, lines 48-49 *	1-9	C 23 F 11/18 C 02 F 5/14
Y	EP-A-0 009 080 (CIBA-GEIGY AG) * Claim 1 *	1-9	
A	US-A-3 717 701 (R.H. CARLSON)		
A	US-A-3 901 651 (R.S. BENNER et al.)		
A	FR-A-2 391 961 (BAYER AG)		
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			C 23 F C 02 F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19-12-1988	Examiner DE ANNA P.L.
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			