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**United States Patent** [19]

Chang et al.

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[54] **SYNTHESIS OF DIMETHYLMETHYLENE  
DINITRAMINE**

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[52] **U.S. Cl.** ..... 564/109; 564/33;  
564/107

[58] **Field of Search** ..... 564/33, 107, 109

[56] **References Cited**

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[57] **ABSTRACT**

A process for preparing 2,4-dinitro-2,4-diazapentane by  
(1) nitrating dimethylurea to form dimethyldinitrourea;  
(2) hydrolyzing the dimethyldinitrourea to form methyl-  
nitramine;  
(3) reacting one mole of methylamine with one mole  
of formaldehyde in aqueous solution to form 2-  
nitro-2-aza-1-propanol; and  
(4) reaction one mole of methylnitramine with each  
mole of 2-nitro-2-aza-1-propanol to form one mole  
of 2,4-dinitro-2,4-diazapentane.

**17 Claims, No Drawings**

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