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[54] **HEME BINDING COMPOUNDS AND USE THEREOF**

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Related U.S. Application Data

[63] Continuation of Ser. No. 354,257, Dec. 12, 1994, Pat. No. 5,464,858, which is a continuation of Ser. No. 87,371, Jul. 7, 1993, Pat. No. 5,424,447.

[51] **Int. Cl.**[6] **C07D 233/64**; C07D 207/335

[52] **U.S. Cl.** **548/335.5**; 548/336.1; 548/340.1; 548/562

[58] **Field of Search** 548/335.5, 336.1, 548/340.1, 562; 562/433, 439, 440, 560, 561, 562; 514/565

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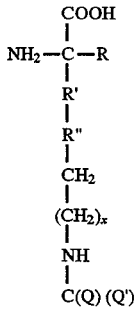
[57] **ABSTRACT**

Inhibitors of nitric oxide formation from arginine useful for treating hypotension, inflammation, stroke and to restore vascular contractile sensitivity to the effects of α_1 adrenergic agonists are physiologically active compounds including N^{δ}-substituted ornithine or N^{ϵ}-substituted lysine moieties or monoalkyl carbon-substituted N^{δ}-substituted ornithine or N^{ϵ}-substituted lysine moieties, having the formula



wherein R is $(CH_2)_yCH_3$ or H, R' is CH_2 or $C(H)(CH_2)_yCH_3$, and R" is CH_2 or $C(H)(CH_2)_yCH_3$, with y ranging from 0 to 5, and x is 0 or 1 and wherein none or only one of R, R' and R" provides an alkyl substituent on ornithine or lysine moiety, and wherein Q is a heme binding moiety and/or a sulfur-containing binding moiety and Q' is —NH_2 when there is a double bond between the omega carbon and Q and Q' is =NH when there is a single bond between the omega carbon and Q, and physiologically acceptable acid addition salts thereof.

2 Claims, 5 Drawing Sheets