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[54] HEMICELLULASE SUPPLEMENT TO IMPROVE THE ENERGY EFFICIENCY OF HEMICELLULOSE-CONTAINING ANIMAL FEED

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[51] **Int. Cl.**[6] **A23L 1/10**

[52] **U.S. Cl.** **426/18;** 426/28; 426/44; 426/53; 426/61; 426/64

[58] **Field of Search** 426/64, 61, 72, 74, 426/53, 54, 18, 20, 21, 28, 44, 46, 53, 54, 615, 618, 622, 623, 625, 627, 629, 630, 634–636

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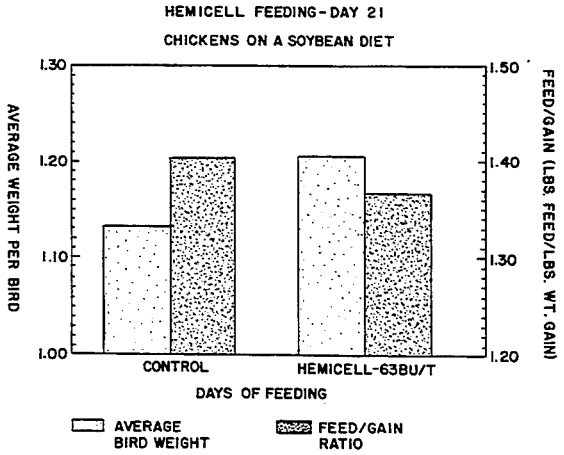
[57] **ABSTRACT**

Soil microorganisms are obtained that produce a hemicellulase which is particularly useful in increasing the available energy content of hemicellulosic foodstuffs. These microorganisms can be cultured per se or can be used as sources of genetic information with which to engineer other microorganisms to produce the enzyme. Thus, commercially useful quantities of native or recombinant hemicellulase can be produced with cultures consisting essentially of microorganisms that produce the enzyme. The hemicellulase can then be employed in a feed composition containing complex carbohydrates which the enzyme degrades, enhancing the nutritional value of the composition.

10 Claims, 5 Drawing Sheets