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(54) **Title:** SYSTEMS AND METHODS FOR ESTIMATING FEED EFFICIENCY AND CARBON FOOTPRINT FOR MILK PRODUCING ANIMAL

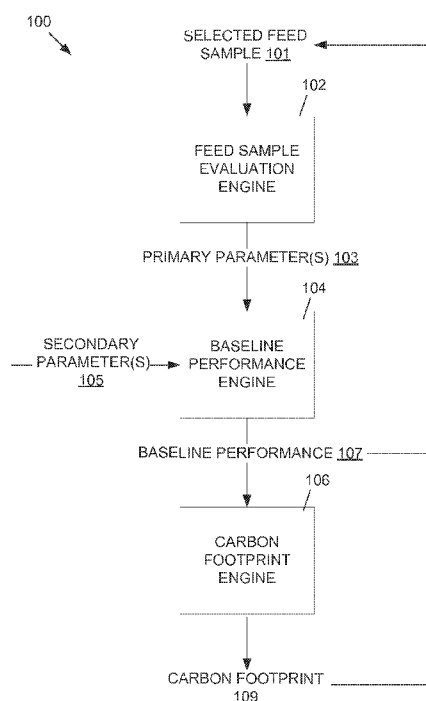


FIG. 1

(57) **Abstract:** Systems and methods for estimating milk producing animal feed conversion efficiency and carbon footprint, such as to allow adjustments to be made in the animals feed to improve milk production, reduce waste, and/or reduce the carbon footprint. In embodiments of the present application, a system is provided that integrates a digestion model of an animal feed with milk production efficiency and carbon footprint. Such systems and methods are useful to analyze and compare different animal feed compositions that differ from one another in one or more components and/or to analyze the effect of the addition of a feed supplement on milk production efficiency and/or carbon footprint.



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