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(54) Title: **METHODS FOR MEASUREMENT AND TREATMENT PREDICATED ON THE PRESENCE OF ADVANCED GLYCOSYLATION ENDPRODUCTS IN TOBACCO AND ITS COMBUSTION BYPRODUCTS**

(57) Abstract

Methods are disclosed for measuring the accumulation of advanced glycosylation endproducts (AGEs), and for lowering the accumulation of advanced glycosylation endproducts, which are predicated on the discovery that such AGEs and their precedent glycotoxins are present in tobacco and its byproducts. More particularly the methods focus on the observation that individuals who smoke or otherwise use tobacco have increased levels of AGEs relative to non-smoking individuals. The present methods relate to the measurement of AGE levels in both individuals and in tobacco and its byproduct, smoke, and to the treatment of such individuals with agents capable of reacting with glycosylation products to either avert or diminish the accretion of AGEs in the body. Methods are also disclosed for the evaluation of the tobacco products to determine their storage status and organoleptic capacity and potential, for the treatment of the ambient atmosphere to lower AGE levels, and for the treatment of the tobacco products and combustion byproducts to lower AGE levels therein. For example, air or other samples may be taken and evaluated by a dosimeter or like device, to determine whether AGE levels exceed normal, after which measures could be implemented to remediate the ambient condition. Likewise, filters and similar devices for removing AGEs from tobacco smoke are disclosed. All such methods and corresponding materials are contemplated and included.