

PATENT COUNTRY : US  
PATENT NUMBER : 4858630  
ASSIGNEE : R J REYNOLDS  
INVENTOR(S) : BANERJEE C K; SHELAR G R  
TITLE : SMOKING ARTICLE WITH IMPROVED AEROSOL FORMING SUBSTRAT  
ABSTRACT : A POROUS CARRIER MATERIAL, PREFERABLY PARTICULATE  
ACTIVATED CARBON OR SINTERED ALUMINA, HAVING A TOBACCO  
FLAVOR MATERIAL AND AN ADSORBED NON-TOBACCO AEROSOL  
FORMING MATERIAL. THE TOBACCO FLAVOR MAY BE COMMUNUTED  
TOBACCO, AQUEOUS OR ORGANIC (E.G. ALCOHOLIC) TOBACCO  
EXTRACT, SPRAY DRIED TOBACCO EXTRACT, ETC. THE NON-TOBA  
AEROSOL FORMING MATERIAL MAY BE GLYCERIN, PROPYLENE GLY  
TRIETHYLENE GLYCOL ETC. THE CARRIER MATERIAL IS MIXED  
WITH A SLURRY OF THE FLAVOR AND AEROSOL FORMING MATERIA  
PROVIDES AN AEROSOL FORMING SUBSTRATE WHICH HAS IMPROVE  
TASTE, IS ECONOMICAL IN USE OF AEROSOL GENERATING MATER  
AND EXHIBITS EASE OF TOBACCO FLAVOR DELIVERY FOR DIFFER  
TOBACCO FLAVORS. REDUCES TENDENCY FOR MIGRATION OF  
VOLATILES TO THE FUEL SOURCE AND OTHER PORTIONS OF THE  
SMOKELESS CIGARETTE DEVICE. SUBSTRATE MAY BE COATED WIT  
GRAPHITE, ETHYL CELLULOSE, TOBACCO WAXES OR SUCH TO  
FURTHER REDUCE FLAVOR LOSS.

KEYWORDS : SMOKELESS CIGARETTE; SILICA; CERAMIC; VERMICULITE;  
MINERAL; SURFACE AREA; PYROLYZED CARBON; NICOTINE RELEA  
STORAGE STABLE

PATENT COUNTRY : US  
PATENT NUMBER : 4732168  
ASSIGNEE : R J REYNOLDS  
INVENTOR(S) : RESCE J L; GENTRY T L  
TITLE : SMOKING ARTICLE EMPLOYING HEAT CONDUCTIVE FINGERS  
ABSTRACT : SMOKELESS CIGARETTE WITH A PREFERABLY CARBONACEOUS FUE  
ELEMENT AND A SEPARATE AEROSOL GENERATING MEANS CONTAIN  
WITHIN A UNITARY HEAT CONDUCTIVE CONTAINER, MAINTAINED  
A CONDUCTIVE HEAT EXCHANGE RELATIONSHIP BY MEANS OF TWO  
MORE FINGER-LIKE EXTENSIONS EXTENDING FROM THE AEROSOL  
GENERATOR CONTAINER. THE FINGERS ARE OF FROM 2 TO 8 MM  
LENGTH AND ABOUT 0.5 TO 3 MM IN WIDTH. THE FINGERS,  
PREFERABLY TWO OR THREE, CONTACT A TOTAL OF FROM 20 TO  
PERCENT OF THE SURFACE OF THE FUEL ELEMENT. SAID TO ENS  
RAPID HEAT TRANSFER WITH EARLIER AND HIGHER VOLUME AERO  
DELIVERY AND HIGHER TEMPERATURES DURING PUFFING AND  
SMOLDERING TO MINIMIZE INCOMPLETE COMBUSTION PRODUCTS.  
EXTENSIONS MAY BE METAL, A HEAT CONDUCTIVE PASTE OR TAP  
KEYWORDS : CONTIGUOUS; ALUMINUM; LINES; PATTERN; SPIRAL; GRID;  
CARBON MONOXIDE; RATIO; SMOKELESS CIGARETTE; FUEL ELEME  
HEAT TRANSFER; AEROSOL GENERATOR