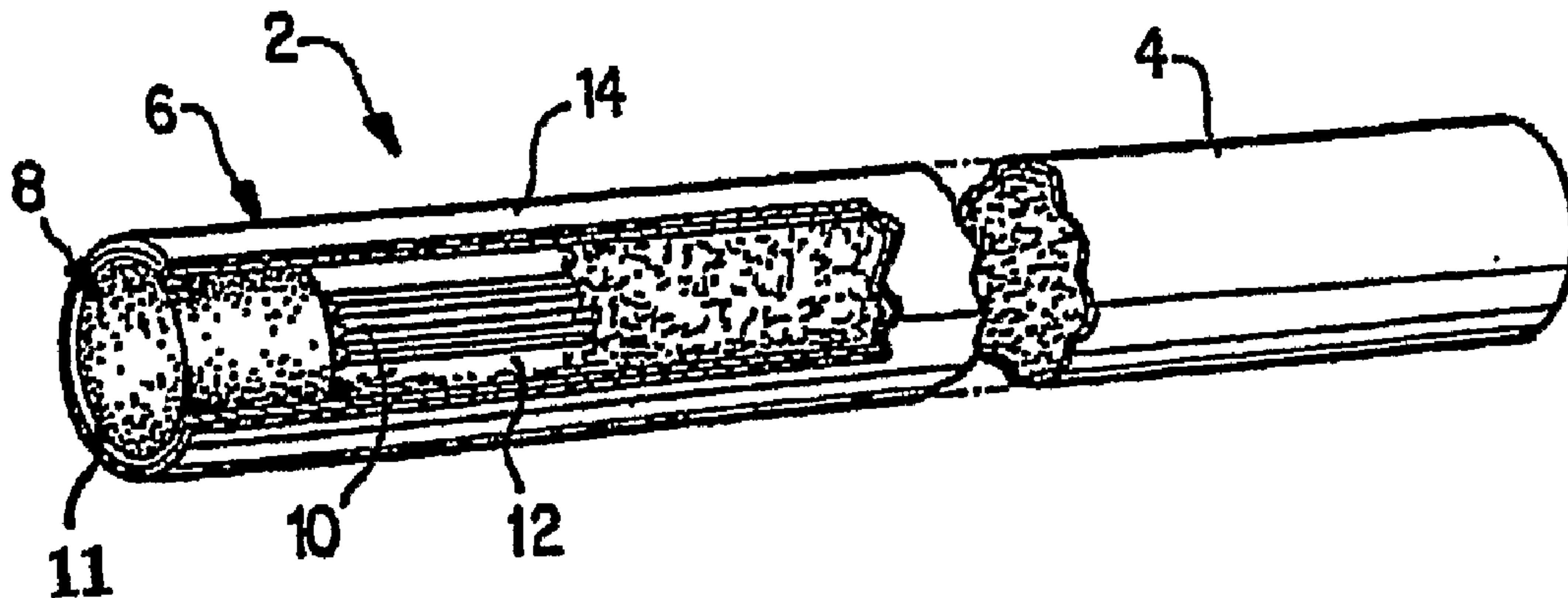




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(54) **Titre : NANOFILS A BASE DE METAL PREPARES AU MOYEN DE TAMIS MOLECULAIRES MESOPOREUX COMME MATRICE, ET LEUR UTILISATION DANS DES ARTICLES DE FUMEURS**
(54) **Title: METAL-CONTAINING NANOWIRES PREPARED USING MESOPOROUS MOLECULAR SIEVES AS TEMPLATES, AND THEIR USE IN SMOKING ARTICLES**



(57) **Abrégé/Abstract:**

Cut filler compositions, smoking articles such as cigarettes 2, methods for making cigarettes and methods for treating cigarette smoke are provided, which involve the use of metal-containing nanowires. The metal-containing nanowires are capable of removing at least one constituent from tobacco smoke, preferably in a selective manner. The metal-containing nanowires may comprise any suitable metal, metal oxide or mixtures thereof. For example, the metal-containing nanowires comprise at least one transition or lanthanide metal or metal oxide thereof. Exemplary metals or metal oxides thereof include, but are not limited to, iron, copper, zinc, titanium, vanadium, palladium, cobalt, molybdenum and manganese. The metal-containing nanowires may be produced by (i) loading at least one metal-containing composition into a mesoporous molecular sieve substrate via repeated incipient-wetness impregnation followed by stepwise calcination to form said nanowires; and (ii) isolating the nanowires by extracting the mesoporous molecular sieve substrate, e.g., with aqueous NaOH.

