

Title (en)  
BRUSH WITH A BRISTLE HOLDER AND METHOD FOR THE PRODUCTION THEREOF

Title (de)  
BÜRSTE MIT EINEM BORSTENTRÄGER UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)  
BROSSE AVEC SUPPORT DE POILS ET PROCEDE DE FABRICATION DE LADITE BROSSE

Publication  
**EP 1100354 B1 20030528 (DE)**

Application  
**EP 99932869 A 19990713**

Priority  
• DE 19834055 A 19980729  
• EP 9904900 W 19990713

Abstract (en)  
[origin: WO0005993A1] The invention relates to a brush with a bristle holder forming a handle and bristles fixed in said holder, wherein the bristle holder has areas highlighted in color which reproduce, for instance, information. The plastic of the bristle holder is filled at least in said areas with pigments absorbing laser rays and changing in color as a reaction thereto. Information is presented in a hygienic and durable manner on the bristle holder by means of laser rays. Alternately, the bristle holder may consist of two plastic layers having different laser ray absorption coefficients at least in the areas close to the surface, the first layer being transparent or translucent and having a lower absorption coefficient while the other layer reacts by changing color. The upper layer can also be permeable to laser rays and the lower layer may have a different color. The lower layer is uncovered by fusion and gasification of the upper layer in the desired areas and the information can be seen by color contrasting. The invention also relates to a method for the production of said brush.

IPC 1-7  
**A46D 9/00**

IPC 8 full level  
**A46B 9/00** (2006.01); **A46B 5/00** (2006.01); **A46D 9/00** (2006.01)

CPC (source: EP KR)  
**A46D 5/00** (2013.01 - KR); **A46D 9/00** (2013.01 - EP)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0005993 A1 20000210**; AR 019949 A1 20020327; AT E241293 T1 20030615; AU 4909899 A 20000221; AU 751933 B2 20020829; BR 9912471 A 20010417; CA 2338817 A1 20000210; CN 1129381 C 20031203; CN 1310589 A 20010829; CZ 2001310 A3 20010912; DE 19834055 A1 20000203; DE 59905760 D1 20030703; DK 1100354 T3 20030929; EG 22152 A 20020930; EP 1100354 A1 20010523; EP 1100354 B1 20030528; ES 2197653 T3 20040101; HU P0102669 A2 20011128; HU P0102669 A3 20011228; JP 2002521110 A 20020716; KR 100639441 B1 20061026; KR 20010071932 A 20010731; NO 20010429 D0 20010124; NO 20010429 L 20010124; PL 193047 B1 20070131; PL 345672 A1 20020102; PT 1100354 E 20031031; RU 2213513 C2 20031010; SK 1412001 A3 20010710; TR 200100280 T2 20011022; TW 404823 B 20000911; UA 72892 C2 20050516; ZA 200100322 B 20011205

DOCDB simple family (application)  
**EP 9904900 W 19990713**; AR P990103734 A 19990728; AT 99932869 T 19990713; AU 4909899 A 19990713; BR 9912471 A 19990713; CA 2338817 A 19990713; CN 99808899 A 19990713; CZ 2001310 A 19990713; DE 19834055 A 19980729; DE 59905760 T 19990713; DK 99932869 T 19990713; EG 91499 A 19990726; EP 99932869 A 19990713; ES 99932869 T 19990713; HU P0102669 A 19990713; JP 2000561854 A 19990713; KR 20017000680 A 20010116; NO 20010429 A 20010124; PL 34567299 A 19990713; PT 99932869 T 19990713; RU 2001105546 A 19990713; SK 1412001 A 19990713; TR 200100280 T 19990713; TW 88112136 A 19990716; UA 2001021386 A 19990713; ZA 200100322 A 20010111