

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

### SHAPING

## B27 WORKING OR PRESERVING WOOD OR SIMILAR MATERIAL; NAILING OR STAPLING MACHINES IN GENERAL

### B27K PROCESSES, APPARATUS OR SELECTION OF SUBSTANCES FOR IMPREGNATING, STAINING, DYEING, BLEACHING OF WOOD OR SIMILAR MATERIALS, OR TREATING OF WOOD OR SIMILAR MATERIALS WITH PERMEANT LIQUIDS, NOT OTHERWISE PROVIDED FOR (applying liquids or other fluent materials to surfaces in general [B05](#); coating wood or similar material [B44D](#)); CHEMICAL OR PHYSICAL TREATMENT OF CORK, CANE, REED, STRAW OR SIMILAR MATERIALS

#### WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

- |             |   |        |  |
|-------------|---|--------|--|
| <b>1/00</b> | <b>Damping wood</b>   |        |  |
| 1/02        | . Apparatus   | 3/0285 | . . . {for improving the penetration of the impregnating fluid}  |
| <b>3/00</b> | <b>Impregnating wood, {e.g. impregnation pretreatment, for example puncturing; Wood impregnation aids not directly involved in the impregnation process} (dyeing, staining <a href="#">B27K 5/00</a>)</b>   | 3/0292 | . . . {for improving fixation ( <a href="#">B27K 3/0285</a> takes precedence)}   |
|             | <b>NOTE</b>   | 3/04   | . . Impregnating in open tanks   |
|             | In groups <a href="#">B27K 3/16</a> - <a href="#">B27K 3/50</a> , the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, impregnating agents are classified in the last appropriate place. {This Note corresponds to IPC Note (1) relating to <a href="#">B27K 3/16</a> - <a href="#">B27K 3/34</a> . } | 3/06   | . . Sap stream methods   |
|             |   | 3/08   | . . Impregnating by pressure {, e.g. vacuum impregnation}  |
| 3/002       | . {employing compositions comprising microorganisms}  | 3/083  | . . . {along the fibers, i.e. longitudinal impregnation}   |
| 3/005       | . {employing compositions comprising microparticles}  | 3/086  | . . . {using supercritical or high pressure fluids}  |
| 3/007       | . {employing compositions comprising nanoparticles}   | 3/10   | . . . Apparatus  |
| 3/02        | . Processes; Apparatus  | 3/105  | . . . . {Injection apparatus}  |
| 3/0207      | . . {Pretreatment of wood before impregnation}  | 3/12   | . . Impregnating by coating the surface of the wood with an impregnating paste   |
| 3/0214      | . . . {Drying (drying in general <a href="#">F26B</a> )}  | 3/14   | . . Bandage methods  |
| 3/0221      | . . . {Pore opening ( <a href="#">B27K 3/0214</a> takes precedence)}  | 3/15   | . . Impregnating involving polymerisation {including use of polymer-containing impregnating agents (macromolecular compounds derived from lignocellulosic materials <a href="#">C08H</a> ; compositions of lignin-containing materials <a href="#">C08L 97/02</a> )} |
| 3/0228      | . . {Spraying apparatus, e.g. tunnels}  |        | <b>NOTE</b>  |
| 3/0235      | . . {Stationary devices on or in legs or poles}   |        | When classifying in group <a href="#">B27K 3/15</a> , classification is additionally made in the groups of subclass <a href="#">C08L</a> for defining the chemical polymeric structure   |
| 3/0242      | . . {using melt impregnation}   | 3/153  | . . . {Without in-situ polymerisation, condensation, or cross-linking reactions}   |
| 3/025       | . . {Controlling the process}   | 3/156  | . . . {Combined with grafting onto wood fibres}  |
| 3/0257      | . . {using rods or tablets, or ampoules, e.g. inserted in pre-drilled cavities}   | 3/16   | . Inorganic impregnating agents  |
| 3/0264      | . . {using staples or nails}  | 3/163  | . . {Compounds of boron}   |
| 3/0271      | . . {Vapour phase impregnation}   | 3/166  | . . {Compounds of phosphorus}  |
| 3/0278      | . . {involving an additional treatment during or after impregnation}  | 3/18   | . . Compounds of alkaline earth metals   |
|             |   | 3/20   | . . Compounds of alkali metals or ammonium   |

- 3/22 . . Compounds of zinc or copper
- 3/24 . . Compounds of mercury
- 3/26 . . Compounds of iron, aluminium, or chromium
- 3/28 . . Compounds of arsenic or antimony
- 3/30 . . Compounds of fluorine
- 3/32 . . Mixtures of different inorganic impregnating agents
- 3/34 . Organic impregnating agents {(polymers [B27K 3/15](#))}
- 3/343 . . {Heterocyclic compounds}
- 3/346 . . {Grafting onto wood fibres ([B27K 3/156](#) takes precedence; macromolecular compounds derived from lignocellulosic materials [C08H](#))}
- 3/36 . . Aliphatic compounds
- 3/38 . . Aromatic compounds {([B27K 3/343](#) takes precedence)}
- 3/40 . . . halogenated
- 3/42 . . . nitrated, or nitrated and halogenated
- 3/44 . . Tar; Mineral oil
- 3/46 . . . Coal tar
- 3/48 . . . Mineral oil
- 3/50 . . Mixtures of different organic impregnating agents
- 3/52 . Impregnating agents containing mixtures of inorganic and organic compounds

**5/00 Treating of wood not provided for in groups [B27K 1/00](#), [B27K 3/00](#)**

- 5/0005 . {Cryogenic treatment}
- 5/001 . {Heating}
- 5/0015 . {by electric means}
- 5/002 . . {Electric discharges, plasma}
- 5/0025 . {by magnetic fields}
- 5/003 . {by using electromagnetic radiation or mechanical waves (infra-red heating of wood [B27K 5/001](#))}
- 5/0035 . . {Electron beam-radiation}
- 5/004 . . {Gamma-radiation}
- 5/0045 . . {X-rays}
- 5/005 . . {Laser-light}
- 5/0055 . . {Radio-waves, e.g. microwaves}
- 5/006 . . {Vibrations}
- 5/0065 . . {Ultrasonic treatment}
- 5/007 . {using pressure ([B27K 3/08](#) takes precedence)}
- 5/0075 . . {Vacuum}
- 5/008 . . {Supercritical or high pressure fluids}
- 5/0085 . {Thermal treatments, i.e. involving chemical modification of wood at temperatures well over 100°C}
- 5/009 . . {using a well-defined temperature schedule}
- 5/0095 . {by employing wrappers}
- 5/02 . Staining or dyeing wood {(wood staining compositions [C09D 15/00](#))}; Bleaching wood (bleaching wood pulp [D21C 9/10](#))
- 5/04 . Combined bleaching or impregnating and drying of wood
- 5/06 . Softening or hardening of wood
- 5/065 . . {Hardening}

**7/00 Chemical or physical treatment of cork (mechanical working of cork [B27J 5/00](#))**

**9/00 Chemical or physical treatment of reed, straw, or similar material (mechanical working of cane or the like [B27J 1/00](#))**

- 9/002 . {Cane, bamboo}

- 9/005 . {Reed}
- 9/007 . {Straw}

**2200/00 Wooden materials to be treated**

- 2200/10 . Articles made of particles or fibres consisting of wood or other lignocellulosic material (wood composite materials made of particles or fibres [B27N](#))
- 2200/15 . Pretreated particles or fibres
- 2200/30 . Multilayer articles comprising wood (multilayered products [B32B](#))

**2240/00 Purpose of the treatment**

- 2240/10 . Extraction of components naturally occurring in wood, cork, straw, cane or reed (solvent extraction [B01D 11/00](#))
- 2240/15 . Decontamination of previously treated wood (decontamination in general [A62D 3/00](#))
- 2240/20 . Removing fungi, molds or insects (biocidal compositions [A01N](#); sterilization or disinfection of wood [A61L](#))
- 2240/30 . Fireproofing (fireproofing materials in general [C09K 21/00](#))
- 2240/50 . Ageing
- 2240/60 . Improving the heat-storage capacity
- 2240/70 . Hydrophobation treatment
- 2240/90 . UV-protection