

# CPC COOPERATIVE PATENT CLASSIFICATION

## C12C BREWING OF BEER (cleaning of raw materials [A23N](#); pitching and depitching machines, cellar tools [C12L](#); propagating yeasts [C12N 1/14](#); non-beverage ethanolic fermentation [C12P 7/06](#))

|             |   |              |  |
|-------------|---|--------------|--|
| <b>1/00</b> | <b>Preparation of malt</b>  | 7/062        | . . . {with a horizontal stirrer shaft}  |
| 1/02        | . Pretreatment of grains, e.g. washing, steeping  | 7/065        | . . . {with a vertical stirrer shaft}  |
| 1/027       | . Germinating   | 7/067        | . . . {with cooling means}   |
| 1/0275      | . . {on single or multi-stage floors}   | 7/14         | . Clarifying wort (Läuterung)  |
| 1/033       | . . in boxes or drums   | 7/16         | . . by straining   |
| 1/047       | . . Influencing the germination by chemical or physical means   | 7/161        | . . . {in a tub with a perforated false bottom}  |
| 1/053       | . . . by irradiation or electric {or wave energy} treatment   | 7/163        | . . . {with transport of the mash by or relative to a filtering surface}   |
| 1/067       | . Drying  | 7/165        | . . . in mash filters  |
| 1/073       | . . Processes or apparatus specially adapted to save or recover energy  | 7/17         | . . . in lautertuns, {e.g. in a tub with perforated false bottom}  |
| 1/10        | . . Drying on fixed supports  | 7/175        | . . by centrifuging  |
| 1/12        | . . Drying on moving supports   | 7/20         | . Boiling the beerwort (brew kettles <a href="#">C12C 13/02</a> )  |
| 1/125       | . Continuous or semi-continuous processes for steeping, germinating or drying   | 7/205        | . . {Boiling with hops}  |
| 1/13        | . . with vertical transport of the grains   | 7/22         | . . . Processes or apparatus specially adapted to save or recover energy   |
| 1/135       | . . with horizontal transport of the grains   | 7/24         | . Clarifying beerwort between hop boiling and cooling  |
| 1/15        | . Grain or malt turning, charging or discharging apparatus  | 7/26         | . Cooling beerwort; Clarifying beerwort during or after the cooling  |
| 1/16        | . After-treatment of malt, e.g. malt cleaning, detachment of the germ   | 7/28         | . After-treatment, {e.g. sterilisation ( <a href="#">C12C 11/00</a> takes precedence)}   |
| 1/18        | . Preparation of malt extract or of special kinds of malt, e.g. caramel, black malt (malt products for use as foodstuffs <a href="#">A23L</a> ) | 7/282        | . . {Concentration or beerwort}  |
|             |   | 7/285        | . . {Drying beerwort}  |
|             |   | 7/287        | . . {Treating beerwort with hopextract ( <a href="#">C12C 7/205</a> takes precedence)}   |
| <b>3/00</b> | <b>Treatment of hops</b>  | <b>9/00</b>  | <b>{Methods specially adapted for the making of beerwort}</b>  |
| 3/02        | . Drying  | 9/02         | . {Beerwort treatment; Boiling with hops; Hop extraction}  |
| 3/04        | . Conserving; Storing; Packing  | 9/025        | . . {Preparation of hop extracts (extraction with beerwort <a href="#">C12C 9/02</a> ); Isomerisation of these extracts; Treatment of beerwort with these extracts; Surrogates of the hop}                     |
| 3/06        | . . Powder or pellets from hops   |              |  |
| 3/08        | . . Solvent extracts from hops  |              |  |
| 3/085       | . . . {Extraction of hops with beerwort}  |              |  |
| 3/10        | . . . using carbon dioxide  |              |  |
| 3/12        | . Isomerised products from hops   |              |  |
| <b>5/00</b> | <b>Other raw materials for the preparation of beer</b>  | <b>11/00</b> | <b>Fermentation processes for beer (preparation of wine <a href="#">C12G 1/00</a>)</b>   |
| 5/002       | . {Brewing water}   | 11/003       | . {Fermentation of beerwort}   |
| 5/004       | . {Enzymes}   | 11/006       | . . {Fermentation tanks therefor}  |
| 5/006       | . . {Beta-glucanase or functionally equivalent enzymes}   | 11/02        | . Pitching yeast   |
| 5/008       | . {Hop surrogates}  | 11/06        | . Acidifying the wort  |
| 5/02        | . Additives for beer  | 11/07        | . Continuous fermentation  |
| 5/023       | . . {enhancing the vitamin content}   | 11/075       | . . {Bioreactors for continuous fermentation}  |
| 5/026       | . . {Beer flavouring preparations}  | 11/09        | . Fermentation with immobilised yeast  |
| 5/04        | . . Colouring additives   | 11/11        | . Post fermentation treatments, e.g. carbonation, concentration ( <a href="#">C12H</a> takes precedence; containers with means specially adapted for effervescing potable liquids <a href="#">B65D 85/73</a> ) |
| <b>7/00</b> | <b>Preparation of wort (<a href="#">malt extract C12C 1/18</a>)</b>   | <b>12/00</b> | <b>Processes specially adapted for making special kinds of beer</b>  |
| 7/01        | . Pretreatment of malt, e.g. malt grinding  | 12/002       | . {using special micro-organisms}  |
| 7/04        | . Preparation or treatment of the mash  | 12/004       | . . {Genetically modified micro-organisms}   |
| 7/042       | . . {Mixing malt with water}  | 12/006       | . . {Yeasts (processes for seeding <a href="#">C12C 11/02</a> )}   |
| 7/044       | . . {Cooling the mash ( <a href="#">C12C 7/067</a> takes precedence)}   | 12/008       | . . {Lactic acid bacteria}   |
| 7/047       | . . part of the mash being unmalted cereal mash   |              |  |
| 7/053       | . . part of the mash being non-cereal material  |              |  |
| 7/06        | . . Mashing apparatus   |              |  |

## C12C

- 12/02 . Beer with low calorie content ([C12C 12/04](#) takes precedence)
- 12/04 . Beer with low alcohol content {(removal of alcohol after fermentation [C12G 3/08](#))}

### 13/00 **Brewing devices, not covered by a single group of [C12C 1/00](#) - [C12C 12/04](#)**

- 13/02 . Brew kettles {([C12C 11/075](#) takes precedence)}
- 13/025 . . {heated with steam}
- 13/06 . . heated with fire
- 13/08 . . with internal heating elements
- 13/10 . Home brew equipment

### 2200/00 **Special features**

- 2200/01 . Use of specific genetic variants of barley or other sources of fermentable carbohydrates for beer brewing
- 2200/05 . Use of genetically modified microorganisms in the preparation of beer
- 2200/31 . Clarifying wort before or during or after cooling
- 2200/35 . Dissolving, reconstituting or diluting concentrated or dried wort