

CPC COOPERATIVE PATENT CLASSIFICATION

C CHEMISTRY; METALLURGY

(NOTES omitted)

CHEMISTRY

C12 BIOCHEMISTRY; BEER; SPIRITS; WINE; VINEGAR; MICROBIOLOGY; ENZYMOLOGY; MUTATION OR GENETIC ENGINEERING

(NOTES omitted)

C12C BEER; PREPARATION OF BEER BY FERMENTATION (ageing or ripening by storing [C12H 1/22](#); methods for reducing the alcohol content after fermentation [C12H 3/00](#); methods for increasing the alcohol content after fermentation [C12H 6/00](#); venting devices for casks, barrels or the like [C12L 9/00](#)); PREPARATION OF MALT FOR MAKING BEER; PREPARATION OF HOPS FOR MAKING BEER

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.

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| 1/00 | Preparation of malt | 5/006 | . . {Beta-glucanase or functionally equivalent enzymes} |
| 1/02 | . Pretreatment of grains, e.g. washing, steeping | 5/008 | . {Hop surrogates} |
| 1/027 | . Germinating | 5/02 | . Additives for beer |
| 1/0275 | . . {on single or multi-stage floors} | 5/023 | . . {enhancing the vitamin content} |
| 1/033 | . . in boxes or drums | 5/026 | . . {Beer flavouring preparations} |
| 1/047 | . . Influencing the germination by chemical or physical means | 5/04 | . . Colouring additives |
| 1/053 | . . . by irradiation or electric {or wave energy} treatment | 7/00 | Preparation of wort (malt extract C12C 1/18) |
| 1/067 | . Drying | 7/01 | . Pretreatment of malt, e.g. malt grinding |
| 1/073 | . . Processes or apparatus specially adapted to save or recover energy | 7/04 | . Preparation or treatment of the mash |
| 1/10 | . . Drying on fixed supports | 7/042 | . . {Mixing malt with water} |
| 1/12 | . . Drying on moving supports | 7/044 | . . {Cooling the mash (C12C 7/067 takes precedence)} |
| 1/125 | . Continuous or semi-continuous processes for steeping, germinating or drying | 7/047 | . . part of the mash being unmalted cereal mash |
| 1/13 | . . with vertical transport of the grains | 7/053 | . . part of the mash being non-cereal material |
| 1/135 | . . with horizontal transport of the grains | 7/06 | . . Mashing apparatus |
| 1/15 | . Grain or malt turning, charging or discharging apparatus | 7/062 | . . . {with a horizontal stirrer shaft} |
| 1/16 | . After-treatment of malt, e.g. malt cleaning, detachment of the germ | 7/065 | . . . {with a vertical stirrer shaft} |
| 1/18 | . Preparation of malt extract or of special kinds of malt, e.g. caramel, black malt (malt products for use as foodstuffs A23L) | 7/067 | . . . {with cooling means} |
| 3/00 | Treatment of hops | 7/14 | . Clarifying wort (Läuterung) |
| 3/02 | . Drying | 7/16 | . . by straining |
| 3/04 | . Conserving; Storing; Packing | 7/161 | . . . {in a tub with a perforated false bottom} |
| 3/06 | . . Powder or pellets from hops | 7/163 | . . . {with transport of the mash by or relative to a filtering surface} |
| 3/08 | . . Solvent extracts from hops | 7/165 | . . . in mash filters |
| 3/085 | . . . {Extraction of hops with beerwort} | 7/17 | . . . in lautertuns {, e.g. in a tub with perforated false bottom} |
| 3/10 | . . . using carbon dioxide | 7/175 | . . by centrifuging |
| 3/12 | . Isomerised products from hops | 7/20 | . Boiling the beerwort (brew kettles C12C 13/02) |
| 5/00 | Other raw materials for the preparation of beer | 7/205 | . . {Boiling with hops} |
| 5/002 | . {Brewing water} | 7/22 | . . . Processes or apparatus specially adapted to save or recover energy |
| 5/004 | . {Enzymes} | 7/24 | . Clarifying beerwort between hop boiling and cooling |
| | | 7/26 | . Cooling beerwort; Clarifying beerwort during or after the cooling |

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| 7/28 | <ul style="list-style-type: none"> After-treatment {, e.g. sterilisation (C12C 11/00 takes precedence)} | 2200/35 | <ul style="list-style-type: none"> Dissolving, reconstituting or diluting concentrated or dried wort |
| 7/282 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Concentration or beerwort} | | |
| 7/285 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Drying beerwort} | | |
| 7/287 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Treating beerwort with hopextract (C12C 7/205 takes precedence)} | | |
| 9/00 | {Methods specially adapted for the making of beerwort} | | |
| 9/02 | <ul style="list-style-type: none"> {Beerwort treatment; Boiling with hops; Hop extraction} | | |
| 9/025 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Preparation of hop extracts (extraction with beerwort C12C 9/02); Isomerisation of these extracts; Treatment of beerwort with these extracts; Surrogates of the hop} | | |
| 11/00 | Fermentation processes for beer (preparation of wine C12G 1/00) | | |
| 11/003 | <ul style="list-style-type: none"> {Fermentation of beerwort} | | |
| 11/006 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Fermentation tanks therefor} | | |
| 11/02 | <ul style="list-style-type: none"> Pitching yeast | | |
| 11/06 | <ul style="list-style-type: none"> Acidifying the wort | | |
| 11/07 | <ul style="list-style-type: none"> Continuous fermentation | | |
| 11/075 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Bioreactors for continuous fermentation} | | |
| 11/09 | <ul style="list-style-type: none"> Fermentation with immobilised yeast | | |
| 11/11 | <ul style="list-style-type: none"> Post fermentation treatments, e.g. carbonation, or concentration (methods for reducing the alcohol content after fermentation C12H 3/00; methods for increasing the alcohol content after fermentation C12H 6/00) | | |
| 12/00 | Processes specially adapted for making special kinds of beer | | |
| 12/002 | <ul style="list-style-type: none"> {using special microorganisms} | | |
| 12/004 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Genetically modified microorganisms} | | |
| 12/006 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Yeasts (processes for seeding C12C 11/02)} | | |
| 12/008 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {Lactic acid bacteria} | | |
| 12/02 | <ul style="list-style-type: none"> Beer with low calorie content (C12C 12/04 takes precedence) | | |
| 12/04 | <ul style="list-style-type: none"> Beer with low alcohol content (methods for reducing the alcohol content after fermentation C12H 3/00) | | |
| | <u>WARNING</u> | | |
| | <p>Group C12C 12/04 is impacted by reclassification into groups C12H 3/00, C12H 3/02, and C12H 3/04.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> | | |
| 13/00 | Brewing devices, not covered by a single group of C12C 1/00 - C12C 12/04 | | |
| 13/02 | <ul style="list-style-type: none"> Brew kettles {(C12C 11/075 takes precedence)} | | |
| 13/025 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> {heated with steam} | | |
| 13/06 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> heated with fire | | |
| 13/08 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> with internal heating elements | | |
| 13/10 | <ul style="list-style-type: none"> Home brew equipment | | |
| 2200/00 | Special features | | |
| 2200/01 | <ul style="list-style-type: none"> Use of specific genetic variants of barley or other sources of fermentable carbohydrates for beer brewing | | |
| 2200/05 | <ul style="list-style-type: none"> Use of genetically modified microorganisms in the preparation of beer | | |
| 2200/31 | <ul style="list-style-type: none"> Clarifying wort before or during or after cooling | | |