

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.

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

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) <p>WARNING</p> <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 		