

Title (en)
Carbonisation device for wine and beverages containing wine

Title (de)
Karbonisierungsvorrichtung für Wein und weinhaltige Getränke

Title (fr)
Dispositif de carbonatation pour le vin et des boissons contenant du vin

Publication
EP 2623190 A1 20130807 (DE)

Application
EP 13153406 A 20130131

Priority
DE 102012100844 A 20120201

Abstract (en)
Carbonation device comprises: a pressure vessel (1); a wine source (6) which is connected to a beverage inlet opening (3) of the pressure vessel via a beverage feed line (5); a conveyor (7) which conveys the beverage from the wine source into the pressure vessel; a carbon dioxide source, which is connected with a gas inlet opening of the pressure vessel via a gas feed line; and a dispensing device, which is connected to a beverage outlet discharge opening through a beverage discharge line. The carbon dioxide source is adapted to press carbon dioxide with gas pressure of 1.5-2.4 bars. Carbonation device comprises: a pressure vessel (1); a wine source (6) which is connected to a beverage inlet opening (3) of the pressure vessel via a beverage feed line (5); a conveyor (7) which conveys the beverage from the wine source into the pressure vessel; a carbon dioxide source, which is connected with a gas inlet opening of the pressure vessel via a gas feed line; and a dispensing device, which is connected to a beverage outlet discharge opening of the pressure vessel through a beverage discharge line. The carbon dioxide source is adapted to press carbon dioxide with gas pressure of 1.5-2.4 bars in the pressure vessel, and the conveyor is formed to convey beverage with a fluid pressure in the pressure vessel, which is increased by 1 bar compared to carbon dioxide. A static mixer is arranged in the beverage discharge line and designed such that a carbonation pressure of the carbonated beverage is decreased by at least 0.5 bar between an input of the mixer and an output of the mixer. Independent claims are also included for: (1) a dispensing system for dispensing wine and wine-containing drinks into glasses and decanters, comprising carbonation device; and (2) enriching wine or wine-containing drinks with carbon dioxide in carbonation device, or in dispensing system, comprising pressing the carbon dioxide from carbon dioxide source in a pressure vessel with gas pressure of 1.5-2.4 bar, preferably 2 bar, conveying the beverage from wine source into the pressure vessel with fluid pressure in the pressure vessel and a carbonation temperature of 4-10[deg] C preferably 6[deg] C, reducing the carbonation pressure of the carbonated beverage in pressure vessel downstream to the static mixer by at least 0.5 bar, preferably 0.63 bars, and drawing the carbonated drink from a tapping device into glasses and decanters.

Abstract (de)
Die Erfindung betrifft eine Karbonisierungsvorrichtung für Wein und weinhaltige Getränke mit einem Druckbehälter (1), einer Weinquelle (6), welche mit dem Druckbehälter (1) verbunden ist, einer Kohlenstoffdioxidquelle (12), welche über eine Gaszuführleitung (11) mit dem Druckbehälter (1) verbunden ist, und einer Zapfeinrichtung (19), welche an den Druckbehälter (1) angeschlossen ist. Die Kohlenstoffdioxidquelle (12) ist ausgebildet, um Kohlenstoffdioxid mit einem Gasdruck von etwa 1,5 bis 2,4 bar in den Druckbehälter (1) zu drücken, und die Fördereinrichtung (7) ist ausgebildet, um das Getränk mit einem im Vergleich zum Kohlenstoffdioxid erhöhten, insbesondere um etwa 1 bar erhöhten Flüssigkeitsdruck in den Druckbehälter (1) zu fördern. Ferner ist ein städtischer Mischer (17) in der Getränkeabfuhrleitung (16) angeordnet und derart ausgebildet, dass ein Flüssigkeitsdruck des karbonisierten Getränks beim Durchströmen des Mischers (17) zwischen einem Eingang (22) des Mischers (17) und einem Ausgang (23) des Mischers (17) um mindestens 0,5 bar abnimmt.

IPC 8 full level
B01F 3/04 (2006.01); **B01F 5/06** (2006.01); **B01F 15/00** (2006.01); **B67D 1/00** (2006.01)

CPC (source: EP)
B01F 23/2341 (2022.01); **B01F 23/2362** (2022.01); **B01F 23/2363** (2022.01); **B01F 25/43141** (2022.01); **B01F 35/2212** (2022.01);
B67D 1/0016 (2013.01); **B67D 1/006** (2013.01); **B67D 1/0067** (2013.01); **B01F 2035/98** (2022.01)

Citation (applicant)
DE 102010012175 A1 20110922 - CARBOTEK HOLDING GMBH [DE]

Citation (search report)

- [X] GB 2157963 A 19851106 - INT DISTILLERS & VINTNERS LIMI
- [I] DE 19742301 A1 19981112 - ASAL HANS [DE]
- [I] US RE37499 E 20020108 - KAZUMA YASUO [JP]
- [I] US 3991219 A 19761109 - KUCKENS ALEXANDER
- [I] WO 2007141339 A1 20071213 - BALDA SOLUTIONS DEUTSCHLAND GM [DE], et al
- [AD] DE 102010012175 A1 20110922 - CARBOTEK HOLDING GMBH [DE]
- [A] US 5842600 A 19981201 - SINGLETERRY RONALD CLINTON [US], et al
- [A] EP 1880618 A1 20080123 - MUROTA WATARU [JP]
- [A] DE 19849628 A1 20000504 - SPIEGEL MARGRET [DE]

Cited by
LU500315B1; CN109700315A; WO2017096505A1; WO2022268847A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2623190 A1 20130807; DE 102012100844 A1 20130801

DOCDB simple family (application)
EP 13153406 A 20130131; DE 102012100844 A 20120201