

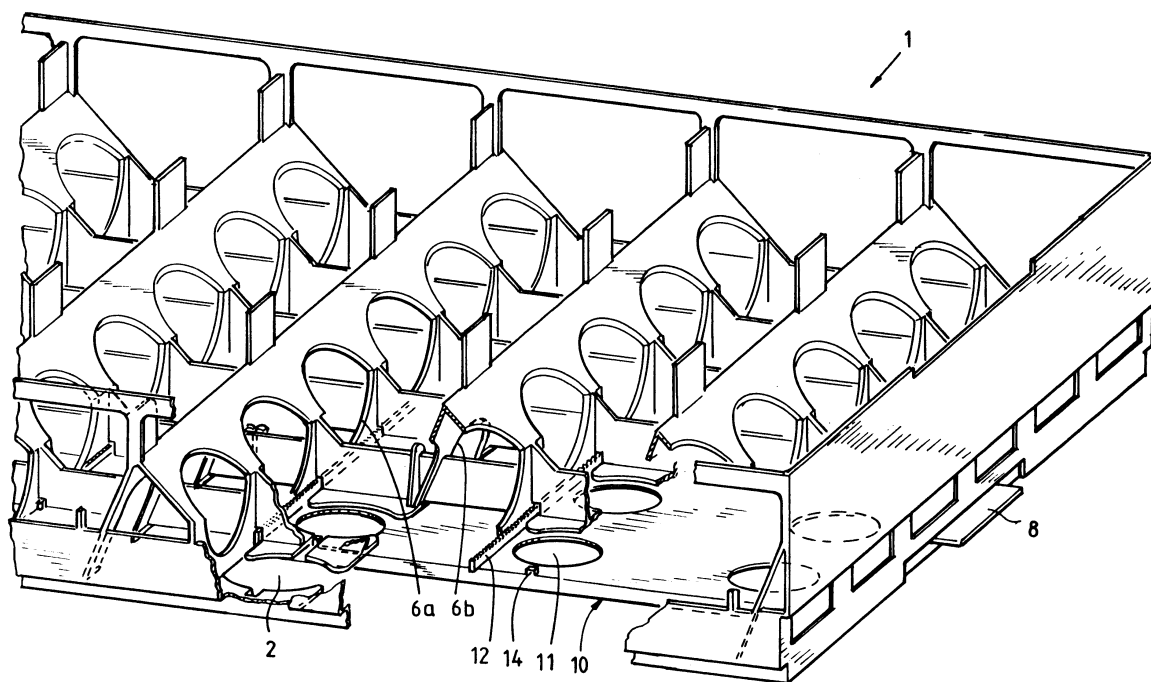
10 Documents

Publication numbers	Title	Current assignees
NL1001466 C2	Egg incubating tray	JAMESWAY INCUBATOR
WO9925184 A1	Incubation method and device for continuous incubation of eggs of all fowl species	DRATT RAINER
BR102013017344 A1	Egg-holding tray for incubation	PAS REFORM
CA2143986 A1	Method and means for incubating eggs	DRATT; RAINER
CA2073672 A1	Method and apparatus for incubating eggs	MARMON
NL6816668 A	Incubator Egg Tray	CANNON ROBERT WILLIAM
DE10020107 C1	Method and device for incubating eggs of any poultry species	DRATT MATHIAS
WO2013171890 A1	Hatching egg inspection device	YAMAMOTO, ...
WO2009154439 A1	Method for the treating of products, such as eggs to be hatched, with a conditioned gas stream, and climate chamber for carrying out the method	HATCHTECH
JP2011106892 A	Hatching egg examination device	NABERU

Family 1/10 - FAMPAT - ©Questel

Title

(EP-862363)

Egg incubating tray**Images****Publication data including kind & date**

NL1001466	C2	1997-04-22	NL1001466
WO9714300	A1	1997-04-24	WO9714300
CA2234147	A1	1997-04-24	CA2234147
AU7229196	A	1997-05-07	AU9672291
EP0862363	A1	1998-09-09	EP-862363
MX9803094	A	1998-11-29	MX9803094
CN1204231	A	1999-01-06	CN1204231
KR19990064284	A	1999-07-26	KR19990064284
BR9611071	A	1999-12-21	BR9611071
BRPI9611071	A1	1999-12-21	BRPI9611071
JP2000506369	A	2000-05-30	JP2000506369
US6196160	B1	2001-03-06	US6196160

**Abstract**

(EP-862363)

An **egg incubating tray** (1) for receiving eggs (3) which are to be **incubated**, comprises separate rigid supporting means (6) for each **egg** (3), the supporting means (6) delimiting an opening (2) on the underside and being formed such that an **egg** (3) which is supported in a stable **incubating** position by the supporting means (6) is situated partly in the opening (2) and can be turned regularly in the supporting means (6) in accordance with a predetermined schedule, about the longitudinal axis (4) of the **egg** (3), by means of turning means (10) which act on the said **egg** part (5) situated in the opening (2), in which the supporting means (6) for each **egg** (3) comprise two curved supports (6a, 6b) arranged apart from one another, the opening (2) being located between the two curved supports (6a, 6b).

Inventors

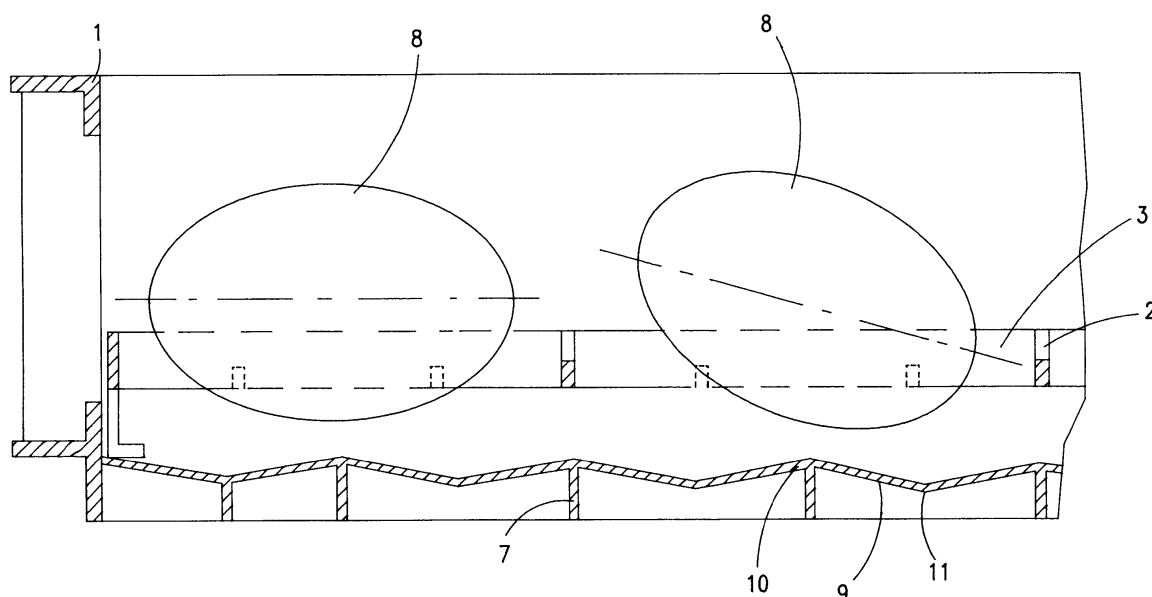
PAS HENRICUS GERARDUS HERMANUS

Latest standardized assignees - inventors removedJAMESWAY **INCUBATOR**

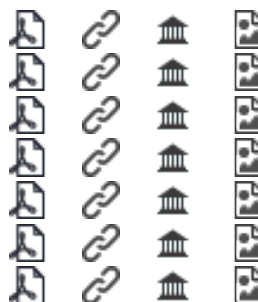
Family 2/10 - FAMPAT - ©Questel

Title

(EP1030553)

Incubation method and device for continuous **incubation** of eggs of all fowl species**Images****Publication data including kind & date**

WO9925184	A1	1999-05-27	WO9925184
CA2309939	A1	1999-05-27	CA2309939
DE19750398	C1	1999-07-01	DE19750398
EP1030553	A1	2000-08-30	EP1030553
US6196159	B1	2001-03-06	US6196159
EP1030553	B1	2001-08-22	EP1030553
ES2164468	T3	2002-02-16	ES2164468

**Abstract**

(EP1030553)

The invention relates to an **incubation** method and a device belonging thereto for continuous **incubation** of eggs of all fowl species. The method is characterized in that the **incubating egg** is randomly placed on **egg** carriers without a predetermined storage position. In addition, the **incubating egg** is brought to an optimal and stable **incubating** position with the assistance of the shape of the openings of the **egg** receivers (3), the **egg** carriers (2), the bases (7) of the racks (1) and an alternating front and backward movement of a reversible movement. The **incubating egg** is guided on the peripheral side with an upward pointing air bubble into the **incubating** position. The **incubating egg** is turned in said **incubating** position after a determined time regimen and is **incubated** in two or more **incubating** positions. In the **incubating** position, up to the hatching of the **chick**, the **incubating** eggs (8) are situated in a slanted position on profiled bases (7) in the hatching racks (1) and are guided on the peripheral side by the shell-shaped constructed holders (4) of the **egg** receivers (3).

Inventors

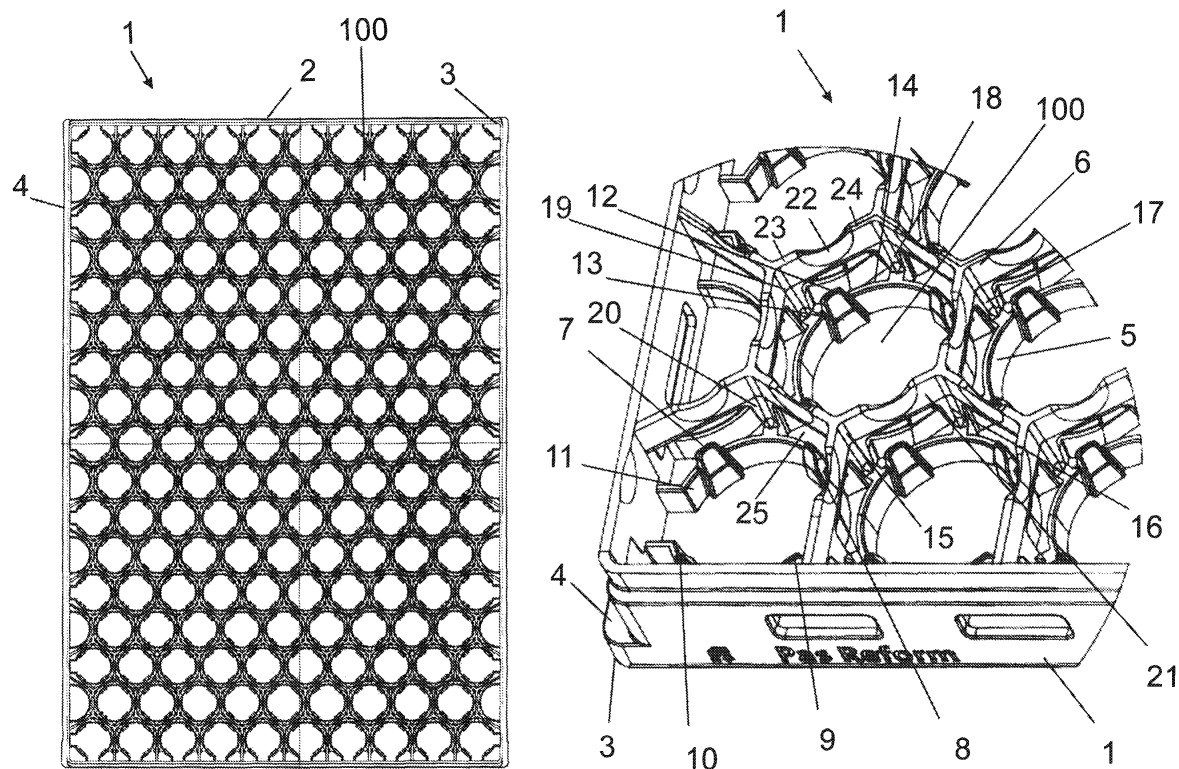
DRATT RAINER

Family 3/10 - FAMPAT - ©Questel

Title

(US9445579)

Egg-holding **tray** for **incubation****Images**



Publication data including kind & date

BR102013017344	A1	2014-05-13	BR102013017344
BR102013017344	A2	2014-09-09	BR102013017344
US2015075440	A1	2015-03-19	US20150075440
US9445579	B2	2016-09-20	US9445579



Abstract

(US9445579)

An **egg**-holding **tray** for **incubation** intended to accommodate eggs has rectangular shape with rounded corners bordered by parallel walls. A lower part of these walls configures a protruding rectangular border. The internal area of the **tray** comprises a set of laterally juxtaposed aureoles with the same structure that fill the entire area of the **tray**. Each individual aureole includes a lower concentric ring beneath an upper ring. The lower ring has a circular shape configured to have four equidistant orthogonal supports located on the internal face which each support has a vertical triangular shape with a rounded upper end and a concave surface that correlates to the inside circumference of the lower ring. The **tray** accommodates eggs under the force exerted by the weight of each of the eggs prevent the **egg** from moving around in the aureole.

Inventors

AANGENENDT BARTHOLOMEUS FRANCISCUS

Latest standardized assignees - inventors removed

PAS REFORM

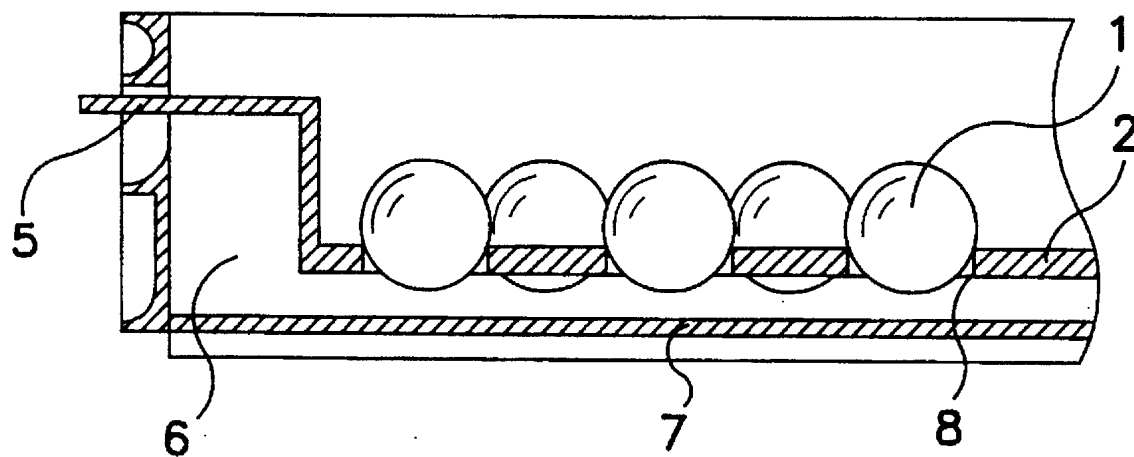
Family 4/10 - FAMPAT - ©Questel

Title

(EP-670111)

Method and means for **incubating** eggs

Images



Publication data including kind & date

CA2143986	A1	1995-09-06	CA2143986
EP0670111	A2	1995-09-06	EP-670111
DE4407407	A1	1995-09-07	DE4407407
EP0670111	A3	1995-11-02	EP-670111
DE4407407	C2	1995-12-14	DE4407407
US5568791	A	1996-10-29	US5568791
RU95103095	A	1997-02-20	RU95103095
RU95103095	A1	1997-02-20	RU95103095
EP0670111	B1	1997-07-09	EP-670111
DK0670111	T3	1998-04-27	DK-670111T
RU2129360	C1	1999-04-27	RU2129360



Abstract

(EP-670111)

The eggs are placed on plastic trays (6) and inserted in the shelves of trucks, being turned by tipping or turning the trays. The eggs are inserted in a supporting rack (2) in each **tray**, for storage, transport and **incubation**, being held clear of the **tray** bottom during the first two of these operations. During **incubation**, they are tilted towards their points and bear freely against the bottom. A mechanism outside the **incubator** turns them through more than 90 deg. **Incubation** is ended by stopping the turning operation, whereupon the eggs are hatched without transferring them. **Incubation** takes place continuously in the **incubator**.

Inventors

DRATT RAINER

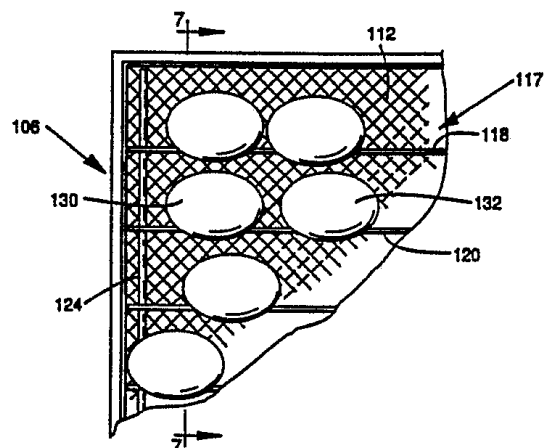
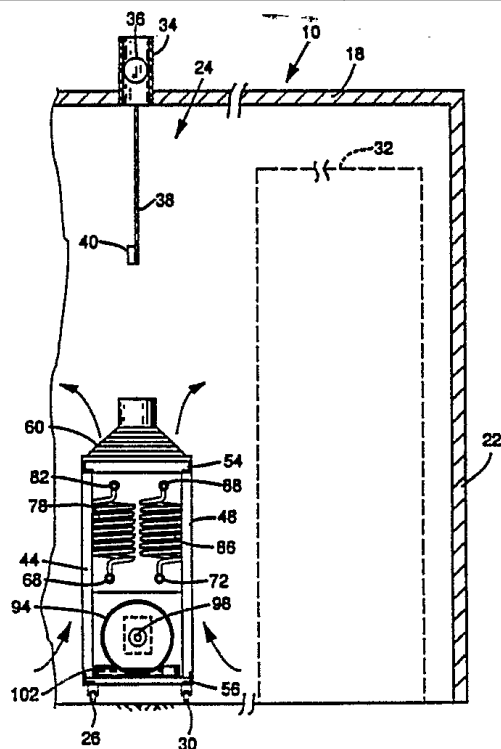
Family 5/10 - FAMPAT - ©Questel

Title

(EP-504157)

Method and apparatus for **incubating** eggs

Images



Publication data including kind & date

CA2073672	A1	1992-04-11	CA2073672
WO9206591	A1	1992-04-30	WO9206591
AU7040891	A	1992-05-20	AU9170408
EP0504157	A1	1992-09-23	EP-504157
EP0504157	A4	1993-04-07	EP-504157
AU646833	B2	1994-03-10	AU-646833
EP0504157	B1	1996-01-03	EP-504157
DK0504157	T3	1996-02-05	DK-504157T
DE69024662	D1	1996-02-15	DE69024662
ES2084042	T3	1996-05-01	ES2084042
DE69024662	T2	1996-05-15	DE69024662
CA2073672	C	2003-09-30	CA2073672



Abstract

(EP-504157)

An **incubator** (10) for **incubating** and hatching eggs includes a removable air control unit (24) for humidifying, heating or cooling, and circulating air in the **incubator** (10). The air control unit (24) is positioned between a pair of racks (32) containing **egg** trays (106) with removable inserts (117, 126) to accommodate differently sized eggs. Sensors (40) monitor various parameters such as temperature and relative humidity. A computer (136) controls the air control unit (24) to maintain operator-selected values of the sensed parameters.

Inventors

CANNON ROBERT W

Latest standardized assignees - inventors removed

MARMON

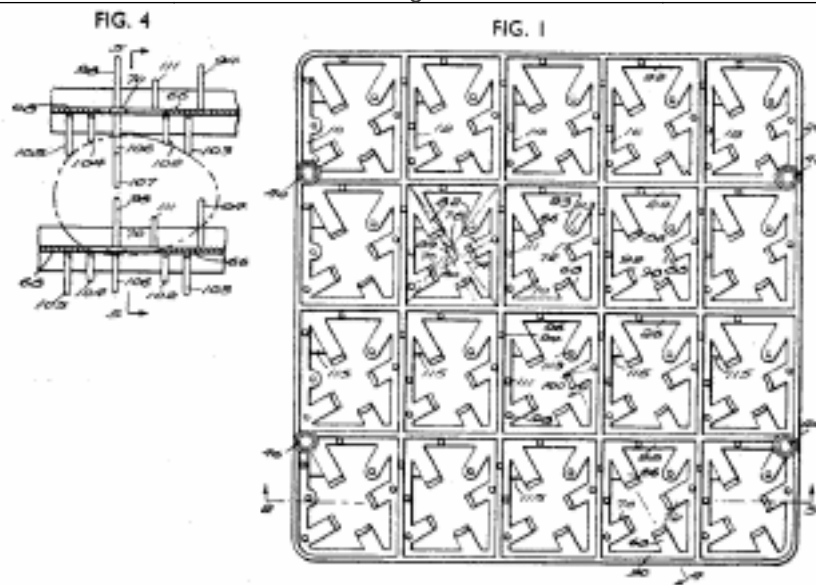
Family 6/10 - FAMPAT - ©Questel

Title

(GB1184299)

Incubator Egg Tray

Images



Publication data including kind & date

NL6816668	A	1969-05-23	NL6816668
GB1184299	A	1970-03-11	GB1184299
DE1809897	A1	1970-06-04	DE1809897
FR1601565	A	1970-08-31	FR1601565



Abstract

(FR1601565)

1,184,299. Trays.R.W.CANNON. 12 Nov., 1968 [21 Nov., 1967; 6 Nov., 1968], No. 53584/68.Heading B8P. [Also in Division A1] An **egg tray** particularly for **incubators** comprises a grid-like structure with rectangular apertures into each of which protrudes resilient fingers 66, 68, 70, 72, upon which an **egg** sits upwardly and downwardly extending fingers 94, 96, 98 &c. and hollow support posts 40-46 which engage in the hollow support posts of a similar **tray** stacked thereupon, the upwardly and downwardly supporting fingers 94 &c. supporting the eggs while allowing free circulation of air.The **tray** is preferably of plastics and resilient to some extent.

(From GB1184299 A)

Inventors

WILLIAM CANNON ROBERT

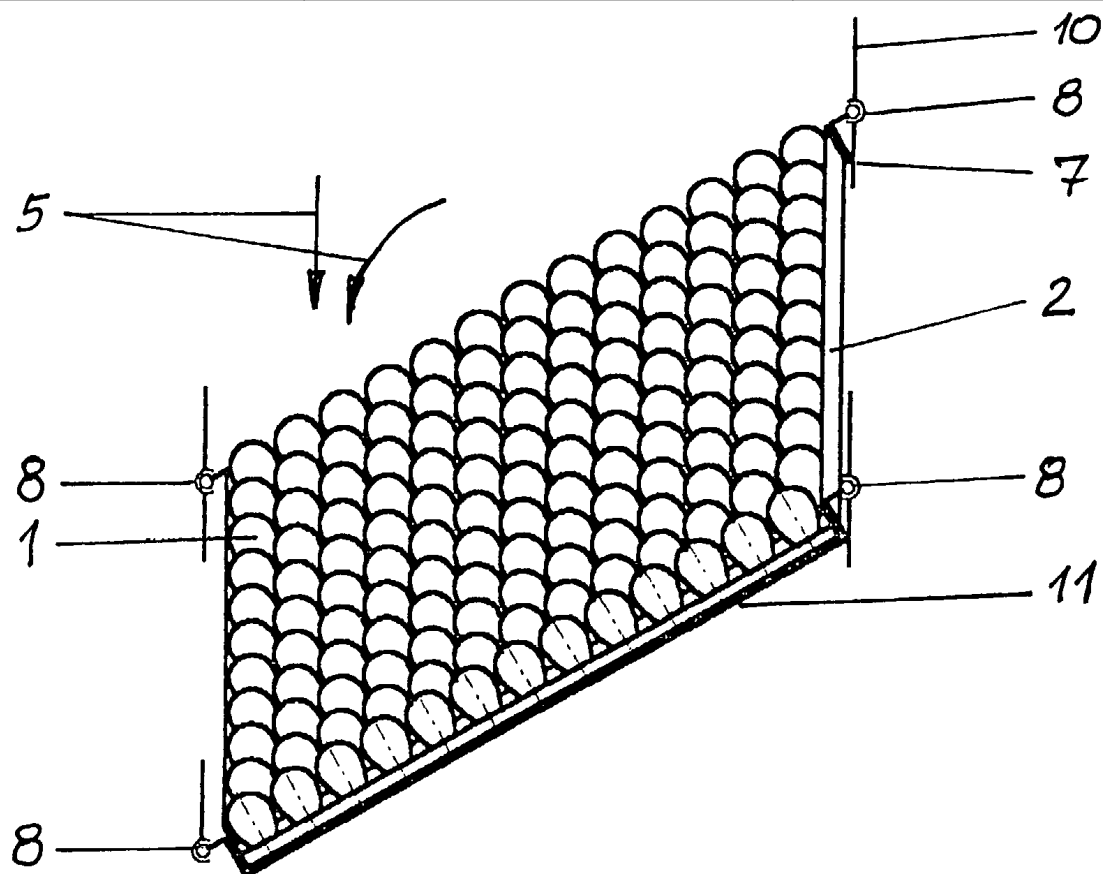
Family 7/10 - FAMPAT - ©Questel

Title

(WO200180631)

Method and device for **incubating** eggs of any poultry species

Images



Publication data including kind & date

DE10020107	C1	2001-06-28	DE10020107
WO200180631	A1	2001-11-01	WO200180631
DE10119942	A1	2002-10-24	DE10119942



Abstract

(WO200180631)

The invention relates to a method and to a corresponding device for **incubating** the eggs of any poultry species that are received by **egg** supports and that are placed and **incubated** in platform rack trucks/platform racks. The inventive method is characterized in that the eggs to be **incubated** are placed in **egg** receptacles of pre-**incubation** platforms in a position deviating from the horizontal/diagonal, the air bubble pointing upwards, and that they remain in this position until they are rearranged. The eggs to be **incubated** are specifically brought into numerous **incubation** positions by subjecting them to force/movement so that the embryos within the eggs to be **incubated** assume any positions on their tracks of movement. The application of force/movement can be controlled and has the effect of reversible movements in a temporarily and spatially limited manner.

Inventors

DRATT MATHIAS

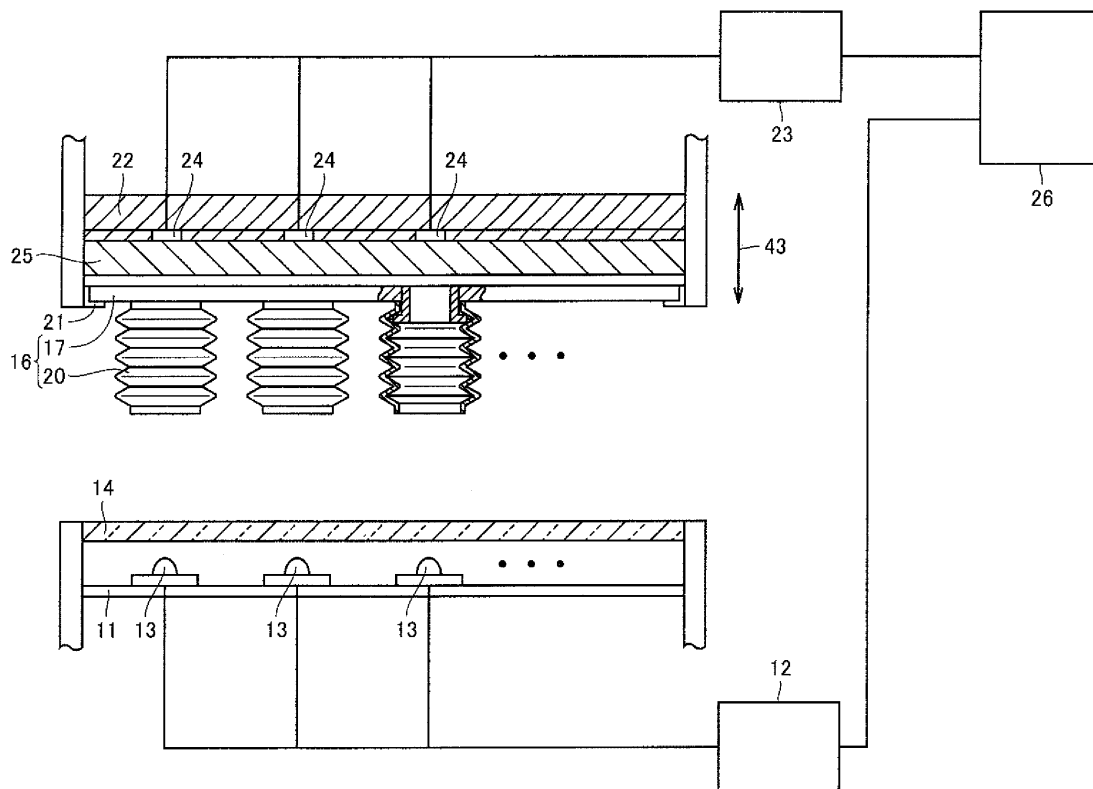
Family 8/10 - FAMPAT - ©Questel

Title

(EP2845477)

Hatching **egg** inspection device

Images



Publication data including kind & date

WO2013171890	A1	2013-11-21	WO2013171890
CN104302168	A	2015-01-21	CN104302168
EP2845477	A1	2015-03-11	EP2845477
US2015138537	A1	2015-05-21	US20150138537
US9131666	B2	2015-09-15	US9131666
EP2845477	A4	2015-12-23	EP2845477
JPWO2013171890	A1	2016-01-07	JP2013171890W
JP5951011	B2	2016-07-13	JP5951011
CN104302168	B	2016-09-14	CN104302168B
BR112014028563	A1	2017-02-21	BR112014028563
EP2845477	B1	2017-05-03	EP2845477
BR112014028563	A2	2017-06-27	BR112014028563



Abstract

(EP2845477)

A hatching egg inspection apparatus includes a loader unit (2), an inspection unit (3) for determining the viability or the like as to whether a hatching egg is an unfertilized egg or a growth-stopping egg, a rejection unit (4) for rejecting a hatching egg determined to be an unfertilized egg or the like, and an unloader unit (5) for sending a hatching egg toward the next step. The inspection unit (3) is provided with a light emitting unit (11) for emitting prescribed light toward the hatching egg, a cap attachment unit (16) through which the light having been emitted to the hatching egg and having transmitted through the hatching egg passes, and a light receiving unit (22) for receiving the light that has passed through the cap attachment unit (16). The cap attachment unit (16) includes a cylindrical cap (20) coming into contact with the hatching egg, and a plate (17) to which the cap (20) is attached. The cap attachment unit (16) is slidably held by a guide rail (21).

Inventors

YAMAMOTO MITSUO

YAMAMOTO TSUYOSHI

FUJITANI SHINICHI

TAHARA TAKATSUGU

OHASHI TOYOAKI

Latest standardized assignees - inventors removed

YAMAMOTO

NABEL

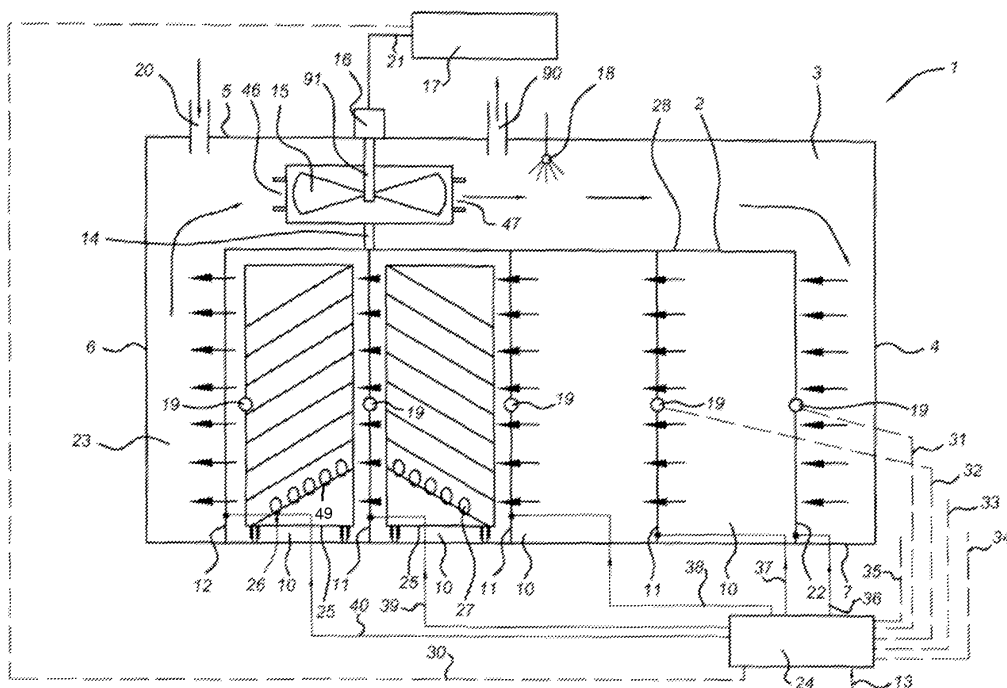
Family 9/10 - FAMPAT - ©Questel

Title

(EP2299807)

Method for the treating of products, such as eggs to be hatched, with a conditioned gas stream, and climate chamber for carrying out the method

Images



Publication data including kind & date

WO2009154439	A1	2009-12-23	WO2009154439
CA2728424	A1	2009-12-23	CA2728424
EP2299807	A1	2011-03-30	EP2299807
US2011107978	A1	2011-05-12	US20110107978
CN102098910	A	2011-06-15	CN102098910
RU2011101534	A	2012-07-27	RU2011101534
RU2471345	C2	2013-01-10	RU2471345
US8826860	B2	2014-09-09	US8826860
US2015075433	A1	2015-03-19	US20150075433
BRPI0822905	A2	2015-06-30	BR200822905
CN102098910	B	2015-07-22	CN102098910B
US9615549	B2	2017-04-11	US9615549
CA2728424	C	2017-05-16	CA2728424



Abstract

(EP2299807)

The present invention relates on the one hand to a method for the treating of products, such as eggs (27) to be hatched, with a conditioned gas stream, which method is carried out in a climate chamber (1), and relates on the other hand to a climate chamber for implementing this method. According to the invention, the climate chamber comprises: a substantially closed compartment (2) having two opposing lateral walls (4, 6) provided with one or more passages (44); a substantially closed channel (3, 23) which extends around the outside of the compartment and connects one of said lateral walls to the other of said lateral walls in order to form together with the compartment a substantially closed circuit; and the gas stream is circulated through the circuit. According to the invention, the direction in which the gas stream is circulated is reversed repeatedly.

Inventors

METER TJITZE

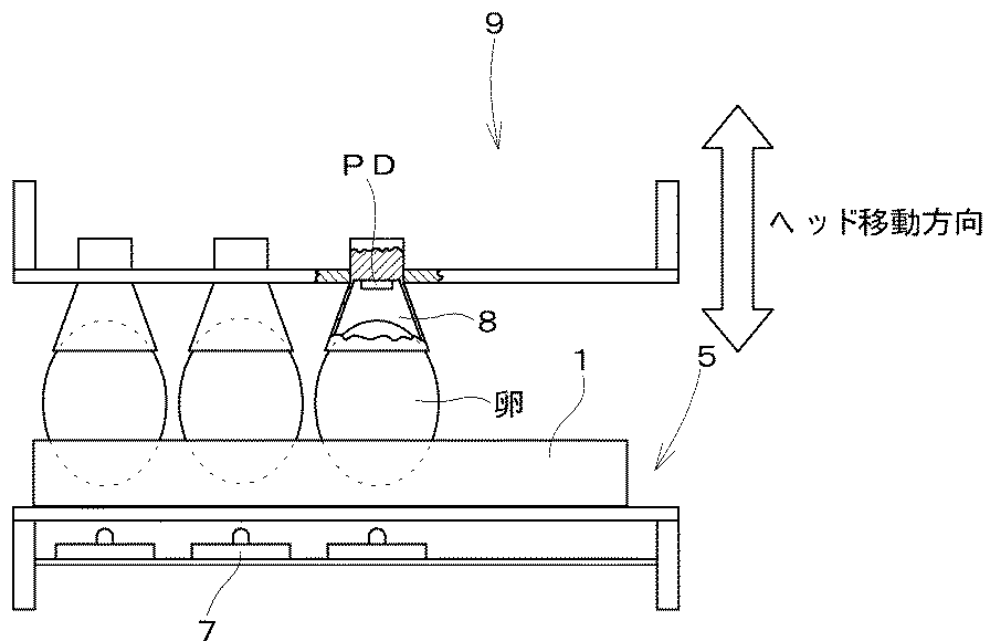
Latest standardized assignees - inventors removed

HATCHTECH

Family 10/10 - FAMPAT - ©Questel

Title

(JP2011106892)

Hatching **egg** examination device**Images****Publication data including kind & date**

JP2011106892	A	2011-06-02	JP2011106892
JP4858863	B2	2012-01-18	JP4858863

**Abstract**

(JP4858863)

PROBLEM TO BE SOLVED: To provide a hatching **egg** examination device capable of discriminating the existence and non-existence of arbitrary hatching eggs in an arbitrary **incubation** process and also classifying the cause and capable of achieving the judge processing capacity of tens of thousands of the hatching eggs per one hour, and a hatching **egg** examination method.

SOLUTION: The eggs placed on the **egg** seat of a **tray** 1 are irradiated with the light from an LED light source 7 and the lights transmitted and scattered through the eggs are received by the photodiodes PD attached to a head 9 along with suckers 8. The received light is converted to light receiving voltage and the quantity of the light of the LED light source 7 is controlled so that the light receiving voltage falls in a preliminarily given set range. The time series of the light receiving

voltage of a proper level is obtained regardless of the state of the hatching eggs and the internal states of the hatching eggs are judged from the fluctuation quantity around the average of the light receiving voltage time series and the transmissivity of the light to the eggs.

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Inventors

FUJITANI SHINICHI

KASHIMORI AYUKO

TAHARA TAKATSUGU

OHASHI TOYOAKI

Latest standardized assignees - inventors removed

NABERU