

[SS 6] /ic A61C7/00 or A61C7/10 or A61C7/22

Results in EPODOC 9.280

[SS 7] magnet or imam or iman

Results in EPODOC 422.089

[SS 8] 7 and 6

Results in EPODOC 41

[SS 9] 8 and cylindrical

Results in EPODOC 1

[SS 10] ..li



1/1 © EPODOC / EPO

PN - [JPH06181935](#) A 19940705

PR - JP19920336933 19921217

AP - JP19920336933 19921217

DT - I

FI - A61C7/00; A61C7/00&Z

FT - 4C052/AA20; 4C052/JJ01; 4C052/JJ09

PA - HITACHI METALS LTD

TI - **MAGNET** ASSEMBLY FOR CORRECTIVE EXTRUSION

AB - PURPOSE:To improve the reliability on the fragility of a rare earth **magnet** and the corrosion resistance in a mouth cavity by providing a case made of a corrosion-resistant nonmagnetic material and storing the **magnet** and a shield plate made of a corrosion-resistant magnetic material to cover the opening section of its recess, and laser-welding butt sections of these parts. CONSTITUTION:A **cylindrical magnet** 1 is fixed in the recess of a case 2 with an adhesive 4, and a shield plate 5 made of corrosion-resistant magnetic stainless is put on it. Laser beam radiation is applied in parallel with the center axis of the cylinder directly to butt sections of weld parts. When a laser spot is radiated, the portion 20 is conically melted, and the case 2 and the shield plate 5 are completely bonded over the whole periphery. No adhesive 4 is exposed on the outer periphery of an assembly at all, and the deterioration due to the aging change of the adhesive 4 is prevented.

[SS 10] ..v

[EPODOC: SS 10] bracket and 8

[SS 11] ..li



1/4 © EPODOC / EPO

PN - [CN202908862U](#) U 20130501

PR - CN20122561850U 20121030

AP - CN20122561850U 20121030

DT - I

PA - ZHUFANGYONG

TI - Correction device

AB - A correction device comprises a magnetic correction device and a front traction device, wherein the magnetic device comprises an integral upper jaw hot-press film socket and an integral lower jaw hot-press film socket, wherein a first permanent **magnet** is fixed and extended out of the rear tooth areas on two sides of the integral upper jaw hot-press film socket respectively, a second permanent **magnet** is fixed and extended out of the rear tooth areas on two sides of the integral lower jaw hot-press film socket respectively, when a patient performs occlusion on the sockets, the first permanent **magnet** is at the right astern of the second permanent **magnet**, the first permanent **magnet** and the second permanent **magnet** pull in opposite to each other in a heteropolar manner, the occlusal surfaces of the integral upper jaw hot-press film socket and the integral lower jaw hot-press film socket are leveled up, a towing hook is arranged in front of the first permanent **magnet**, the front traction device comprises a forehead pad, two ends of the forehead are connected with a **bracket** respectively through a first fixed block, the bottom of the **bracket** is connected with a chincap through a second fixed block, a cross rod is connected to the middle part of the **bracket** and is mounted with a towing sleeve connected with the towing hook in a cooperated manner, and the towing sleeve is connected onto the cross rod and is fastened through a fastening piece. The correction device has an excellent correction effect.

2/4 © EPODOC / EPO

PN - [US4565526](#) A 19860121

PR - JP19840131962 19840628

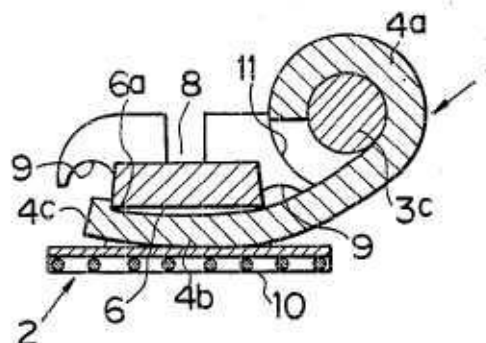
AP - US19840660365 19841012

DT - *

CT - [US1323141](#) A []; [US3353271](#) A [];
[US3793730](#) A []; [US3881252](#) A [];
[US3984915](#) A []; [US4068379](#) A [];
[US4424030](#) A []

CCI - [A61C7/006](#) ; [A61C7/30](#)

PA - SANKIN IND CO [JP]



- TI - Orthodontic appliance
- AB - An orthodontic appliance for correcting teeth in a patient's mouth, has a **bracket** having a slot or groove and adapted to be secured to a tooth of the patient by means of an adhesive, a correcting wire placed in the slot or groove of the **bracket**, a **magnet** body having at least one **magnet** element, and a holder detachably attached to the **bracket** for holding the **magnet** body.

3/4 © EPODOC / EPO

- PN - [JP2005237658](#) A 20050908
- PNFP - JP4161055B B2 20081008
- PR - JP20040051353 20040226
- AP - JP20040051353 20040226
- DT - I
- FI - A61C7/00&B; A61C7/00&Z; A61C7/02
- FT - 4C052/JJ02; 4C052/JJ10
- PA - (A)
KAWADA TOSHITSUGU
- TI - (A)
ORTHODONTIC FORCE APPLYING MEMBER, AND ORTHODONTIC MECHANISM USING THE SAME
- AB - (A)
PROBLEM TO BE SOLVED: To provide an orthodontic force applying member by which force to be loaded on teeth via a **bracket** is easily adjusted, which has excellent corrosion resistance and is compact, where both of attraction and repulsion of a **magnet** can be utilized, and by which systematic orthodontics matching the state of a patient is easily carried out, and an orthodontic mechanism using the member.
- SOLUTION: The orthodontic force applying member consists of a corrosion resistant case and a bar **magnet** sealed and housed in the corrosion resistant case. The corrosion resistant case is provided with a main wire insertion part for orthodontics in parallel to the bar **magnet**. The orthodontic mechanism is obtained by inserting and arranging the orthodontic force applying member so that the same poles or different poles oppose to each other so as to apply orthodontic force to the teeth through the **bracket**.
- COPYRIGHT: (C)2005,JPO&NCIPI

4/4 © EPODOC / EPO

- PN - [JP2001104342](#) A 20010417

PNFP - JP3584808B B2 20041104
 PR - JP19990283497 19991004
 AP - JP19990283497 19991004
 DT - I
 FI - A61C7/00&A; A61C7/00&Z; A61C7/12
 FT - 4C052/JJ03
 PA - (A)
 AICHI STEEL WORKS LTD
 TI - (A)
 ORTHODONTIC APPARATUS
 AB - (A)

PROBLEM TO BE SOLVED: To provide an orthodontic apparatus utilizing the **magnet** type to prevent a patient from feeling discomfort at the initial stage of orthodontic process, being small, and having an unlimited travel distance. SOLUTION: In the orthodontic apparatus comprising brackets mounted on the front surfaces of a plurality of teeth for correction and wires interconnecting the brackets, a **magnet** is provided which is fixed by a fixing device to the **bracket** on one of two adjacent teeth for correction and which has a sliding portion enabling the **magnet** to slide against the wire. Another **magnet** is provided which is fixed to the **bracket** on the other of the two adjacent teeth for correction and which has a sliding portion enabling it to slide against the wire. Both magnets are opposite to each other and arranged to be capable of sliding against the wires.

[SS 11] ..v

[EPODOC: SS 11] bracket and 7

Results in EPODOC 7.245

[SS 12] cylindrical and 11

Results in EPODOC 429

[SS 13] kook and 12

Results in EPODOC 0

[SS 14] claw and 12

Results in EPODOC 2

[SS 15] ..li



1/2 © EPODOC / EPO

PN - [CN203193441U](#) U 20130911

PR - CN20132121880U 20130315

AP - CN20132121880U 20130315

DT - I

PA - ZHEJIANG FENGSHANG TECHNOLOGY CO LTD

TI - Connection structure of stator and speed reducing mechanism of **claw-pole permanent-magnet** synchronous motor

AB - The utility model belongs to the technical field of motors and in particular to a connection structure of a stator and a speed reducing mechanism of a **claw-pole permanent-magnet** synchronous motor. The technical problems such as unreasonable design in the prior art are solved. According to the connection structure of the stator and the speed reducing mechanism of the **claw-pole permanent-magnet** synchronous motor, the synchronous motor comprises a housing having an open end, the connection structure comprises a speed reducing mechanism and a **cylindrical stator**, and the speed reducing mechanism comprises a fixed **bracket**. The connection structure is characterized in that the fixed **bracket** is mounted on the open end of the housing, one end of the stator is fixed on the fixed **bracket**, and the other end of the stator is suspended in the housing. Compared with the prior art, the connection structure has the following advantages: the design is more reasonable, the structure is simpler, the production efficiency of the motor can be improved, the stator and the fixed **bracket** are firmly fixed, a circumferential rotation phenomenon is less likely to occur, and the service life of the motor is prolonged.

2/2 © EPODOC / EPO

PN - [GB1235887](#) A 19710616

PR - AU19670025846 19670814

AP - GB19680038796 19680814

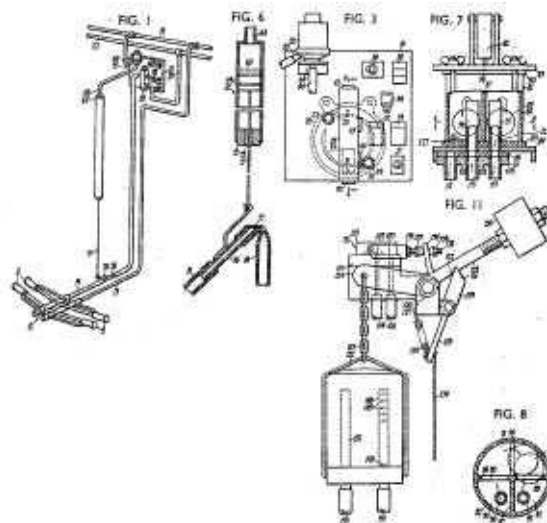
DT - **

CCI - [A01J5/017](#)

PA - PADMAN JOHN NEVILLE [AU];
CUMMINS DONALD HADDEN [AU]

TI - IMPROVEMENTS RELATING TO
MILKING MACHINES

AB - 1,235,887. Milking machines. J. N. PADMAN and D. H. CUMMINS. 14 Aug., 1968 [14 Aug., 1967], No. 38796/68. Heading A1M. Apparatus for removing milking machine teat cups from milking animals comprises milk flow detecting means associated with a milking line connected to a set of teat cups and teat cup removing means operatively responsive to remove the teat cups when the milk flow drops below a predetermined quantity.



The milking apparatus operates in the conventional manner and includes a standard set of milking teat cups 11 connected to **claw** 12 connected by rubber tubes 13, 14 to the vacuum line 16 and control means 17. In the first embodiment, Figs. 1, 3, 6, a milk inlet tube 23 is connected to the interior 47 of a flow control plate 26 and an outlet tube 24 is connected with passage 52 of the flow control plate. The tubes and control plate 26 are mounted on plate 18. A float tube 28 containing a magnetic float 39 is also connected to the flow control plate 26. As milk begins to flow the float chamber 28 begins to fill and the **magnet** in the float 39 no longer holds reed switch 44 open. As the flow increases to more than half pounds of milk per minute the float opens reed switch 43 presetting microswitch 32. When the flow decreases the float falls and opens again reed switch 44 which this time causes the preset microswitch circuit to close a circuit connected to a solenoid operated valve 62. The activated solenoid closes the valve 62 so that the line 66 and cylinder 67 are connected to the vacuum line 16. Piston 68 rises causing cord 71 to lift the rigid pipe 76 closing the line 14 at 77. As the teat cups are disconnected from the vacuum they are released from the animal and drawn upwards. A reset button 37 operates the microswitch circuit to disconnect the solenoid and reed switch. In the second embodiment, Fig. 7, control means 81 are connected between milk line 22 and milk line 13. The control means comprises a

sealed **cylindrical** casing divided into three compartments 90, 91, 92, Fig. 8, by transverse walls 86, 87 with holes 88, 89 formed in wall 86. A spherical float 93 of larger diameter than the holes 88, 89 rests on either side of a handle 94. Milk inlet/outlet tubes 96, 97 extend into compartments 90, 92. A control member 109 having a housing 111 with three integral tubes 112, 113, 114 is attached to the bottom of the cylinder 82. Tubes 112, 114 are connected by a Y piece to milk line 22 and tube 113 to milk line 13. In operation, the milk flows from the teat cups to chamber 90 via tubes 113, 96 and through compartment 91, 92 via holes 88, 89 to be withdrawn via tube 97. As the flow increases the float 93 is forced over the handle 94 to a position near hole 89. As the flow decreases the float is sucked into sealing engagement with hole 89, sealing off chamber 92. The vacuum supply to chambers 90, 91 is cut off, the pressure becomes atmospheric causing diaphragm 80 to rise and actuate a valve 101 so that a vacuum applied to cylinder 67 via outlet port 103 causes the teat cups to be withdrawn as before. The control means is reset by pivoting it so that tubes 112, 113 communicate with tubes 96, 97 respectively and the milk flow is reversed. In the third embodiment, Fig. 11, the control means 121 comprises a flow control bowl 122 connected in the milk line 22 suspended by a chain 123 from arm 124 mounted on boss 120 pivoted on **bracket** 127. A counterbalance arm is also

mounted on the boss. The counterbalance 130 is more than the dry weight of the bowl 122 but less than the bowl when the flow is more than half pounds per minute. The milk flows from the teat cups to the bowl 122 which then over-rides the balance. The spring 134 moves arm 129 about its pivot so the end 131 moves from the notch 132. The milk flows out through apertures 149. When the flow decreases below half pounds per minute the balance 130 is heavier and rotates its pivot causing the slide valve 137 to open the top of the cylinder 67, Fig. 1, and remove the teat cups. The control means 121 may be reset by rotating the arm 129 by means of cord 154. -Further modifications include a vacuum or electrically operated valve incorporated in the milk line from the teat cups to close this line prior to removal of the teat cups, an adjustable valve in the vacuum line to cylinder 67 to control the rate of removal of teat cups and a second vacuum operated valve operatively connected to the cylinder 67 to open the gate to the milking bail when the teat cups are removed. The control means 17 may include further electrical circuitry to allow the teat cups to be dipped in a cleaning and/or sterilizing agent.

[SS 15] ..v

[EPODOC: SS 15]