	(19) (12)	(KR) (B1)	
(51) 。Int. CI. ⁷ B63B 17/00		(45) (11) (24)	2003 02 06 10 - 0370662 2003 01 20
(21) (22)	10 - 2002 - 0060539 2002 10 04	(65) (43)	0000 - 0000000 0000 00 00
(73)	917 - 6	1001	
(72)	339 1	102 710	
(74)			
:			
(54)			
		, ,	(PLC: power line communicat
ion) ,	,		,
,	가 .		가
3	, ,		

1 2 1 3 4 3 5 3 6 3 7 200, 210, 220: 201: 203: 202: 300, 310, 320: 331, 351: 330, 350: 333, 353: 332: 340, 360, 370: 341: 342, 374: 361, 371: 352: 362: 372: 400: 373: 500: 600:

, , (PLC: powe r line communication) , ,

, into communication,

```
(PLC) , 가
                                                          (HA: home automation)
                 1Mbps
                                         가
                                                                                가
                                                                    가
  1 2
   (100~102)
                                                                            (103 \sim 105)
                                      (103 \sim 105)
    (106)
                              (107)
                                                 (108)
                                                                     (100 \sim 102)
                    (106)
          가
                                                      (103~105)
                              (107)
(108)
                       (103~105)
                                                    (100 \sim 102)
                  (100 \sim 102)
                                                         (103 \sim 105)
   , 2
                               (103~105)
                                                                               (109)
                    (Power IN, Power OUT)
                                                                 (106)
   (107)
                                                                                (Hydraulic IN,
Hydraulic OUT)
                                 (108)
                                                (Control OPEN, Control CLOSE)
 가
                                                                    (113)
                         (actuator)(111)
      (110)
                                                    (112)
                                                                             (114)
        (111)
                          (109)
                                                                            (111)
                                                            (114)
       (112)
                          (113)
                                                                            (113)
                        (108)
                                                          ( )
                                                     가
                                                        30
                            가 150[M]
                                                                    , 9[km]
                                                                                           9[km
]
                                                                                 가
                             ( )
                        가
```

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< : > , 3 , (200~220)

(300~320) , (300~320) (400) (500) (600) .

, (400) (200~220) 7[†] , (500) (300~320) , (600) (300~320) .

, (200~220) 가 ,

, (200~220) 가 , (300~320) .

 , 4
 (300~320)
 , (330)

 (331)
 (332)
 (333)
 , (331)

 (500)
 (600)
 , (333)
 , (201)

(600) . (201)

- 5 -

```
(342)
                 (340)
                                 (341)
                                                                          (341)
    (332)
                                                 가
                                                                                     (342)
        (341)
                                                      (342)
                                                                                      (202)
           (201)
                     (202)
                                    (201)
                                              (203)
                                                                          (202)
                                                                                         (
342)
             (201)
                                              (203)
                                                             (201)
           (600)
                                        7
                                      (AC Line)
                                                        60Hz
                                    (300~320)
              (500)
                                                                        (600)
 (300~320)
                                               (500)
                                                                                (600)
                                                                7
             (Add)
                (500)
                                 (600)
                                                         가
          (330)
                                                            (331)
                                (331)
                 (332)
                (332)
                                    (331)
                                                                                 (341)
                (341)
                                                                           (400)
                (341)가
                                                  (342)
                                                                            (342)가
                                     (202)
           (342)
                                                        (201)
                                                                                         (20
1)
              (600)
                                                       (201)
                                                                      (Add)가
          (201)
                          가
        (203)
                       (201)
                                                                   (333)
                (201)
                                                                            가
 (333)
                                           (600)
                                                                 (201)
                                                         ( 5
                                                                 )
                                                                                          )
                                      (300 \sim 320)
                                                             (351)
                                                                                (352)
                                                          (500)
       (353)
                                          (351)
                                                                              (600)
                                                         (352)
                                 (201)
       (353)
                                                           (600)
```

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```
(360) (361) (362)
                                                   (361)
                                               , (3
(361)
 (352)
                     (202) (201)
  (362)
             (202)
                     (201)
                                  (203)
                                                       (202)
                                             (201)
                                  , (203)
  (360)
            (201)
           (600)
<
                                       (351)
(500)
                            (350)
                                                       (352)
  6
  (353)
                            (351)
                                                      (600)
                                       (352)
                     (201)
  (353)
                                         (600)
            (370) (371) (372) (373)
(352) (372) (373) , ,
                                                        (374)
  ,
(371)
 (371)
                                                             (374)
               . (374)가
                                                          (202)
                       (201) .
  (201)
              (202)
                        (201) (203)
                                                       (202)
                                            (201)
                                 , (203)
  (370)
            (201)
           (600)
                                                가 150[M] ,
30
                       , 9[km]
                                        9[km]
                        1\sim2[km]
                                        가
           가
(57)
    1.
```

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8. 1 ,

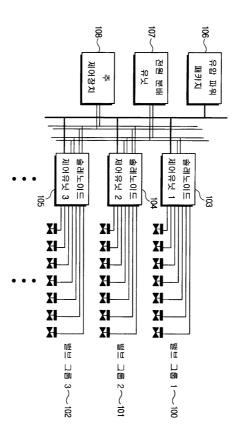
, 가 ,

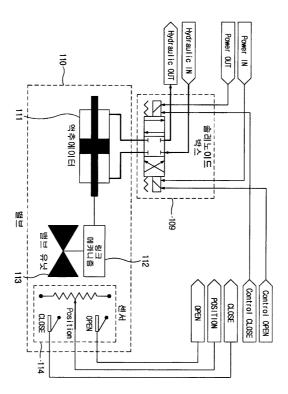
9.

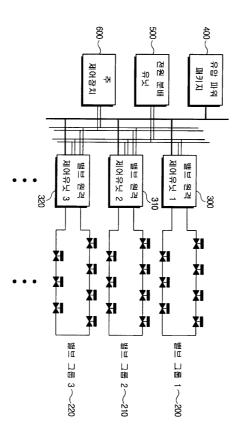
8 , ,

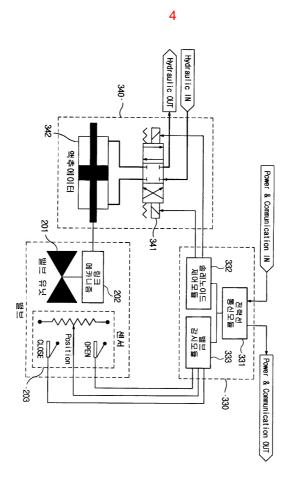
. 10.

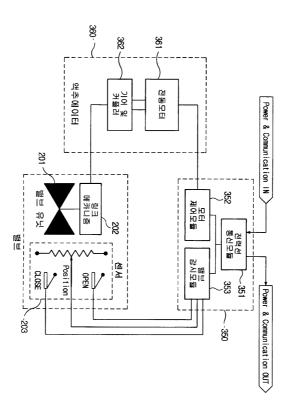
2 , ;

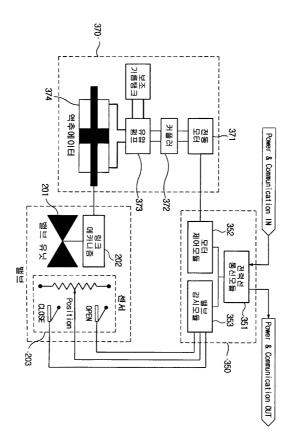












헤더	밸브 유닛 Add	개폐정보	