

Fig.1

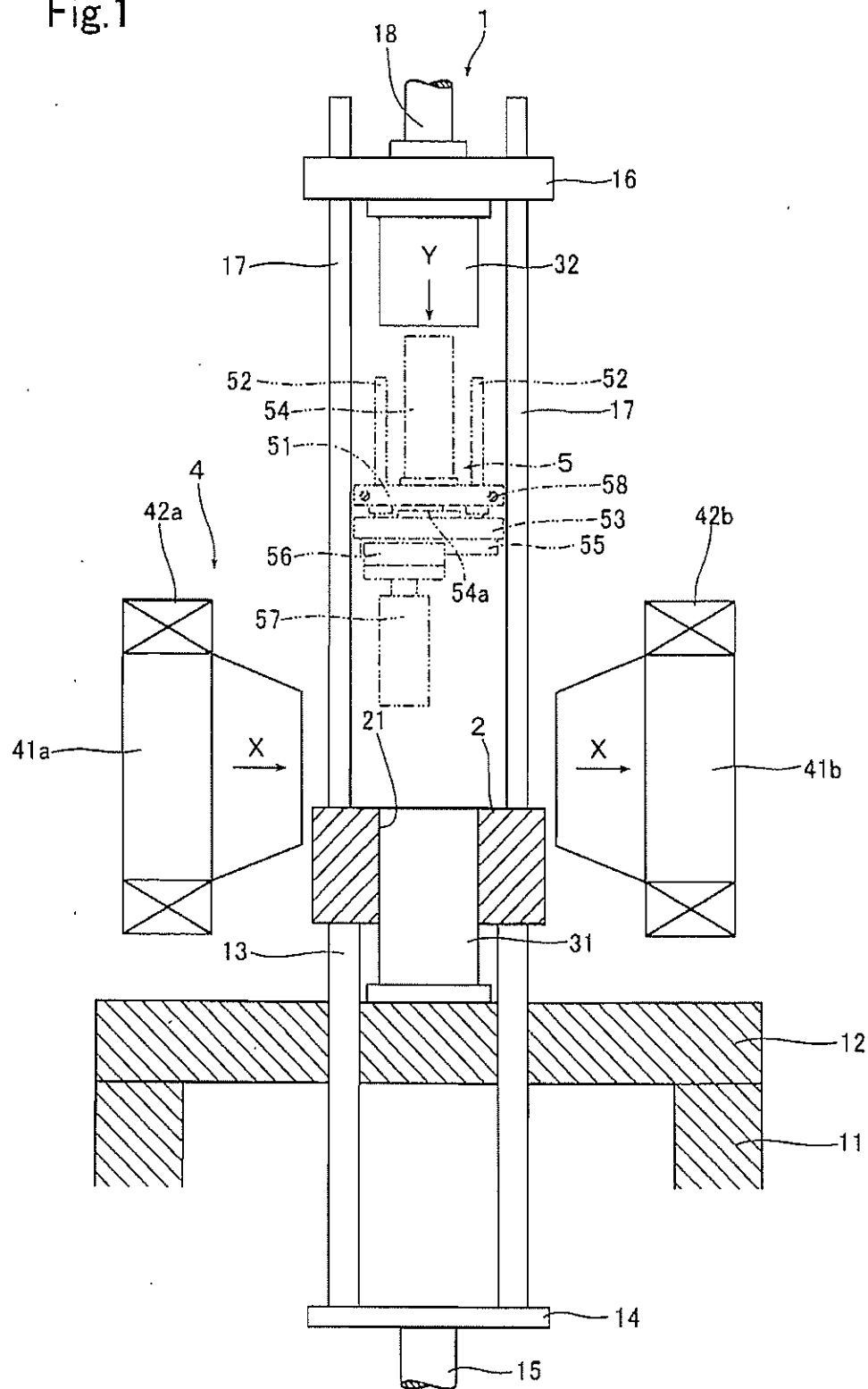


Fig.3

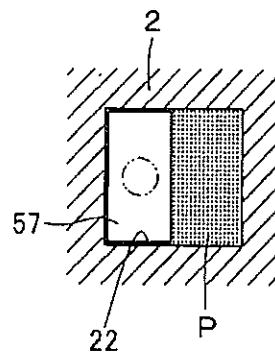


Fig.4(a)

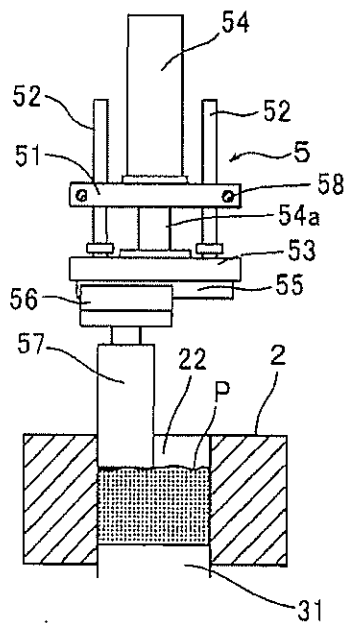


Fig.4(b)

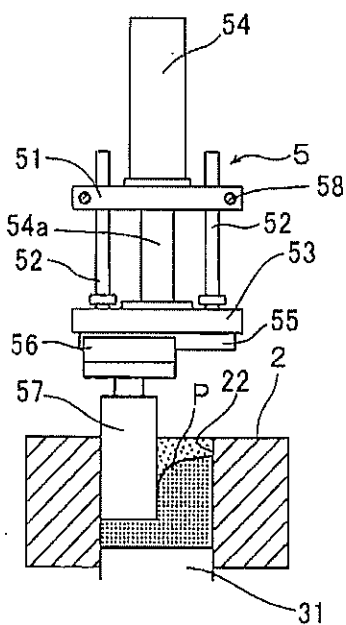


Fig.4(c)

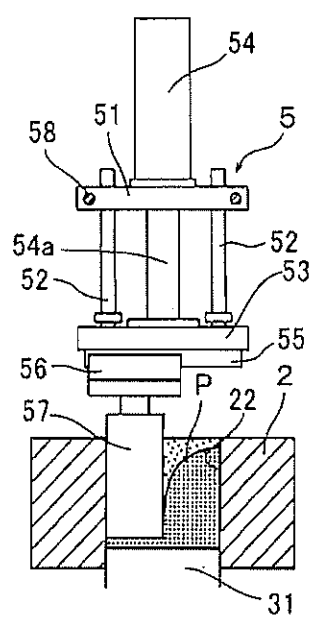


Fig.4(d)

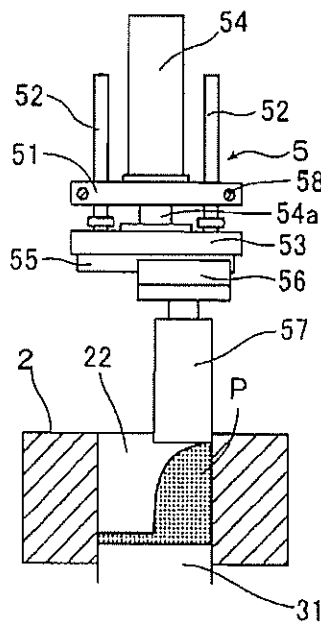


Fig.4(e)

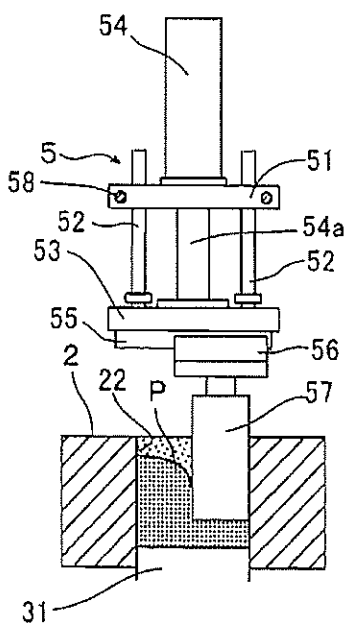


Fig.4(f)

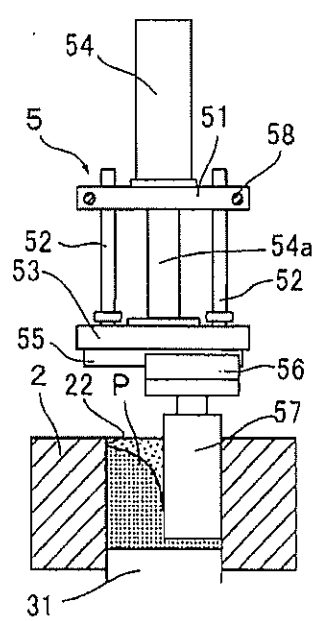


Fig.5(a)

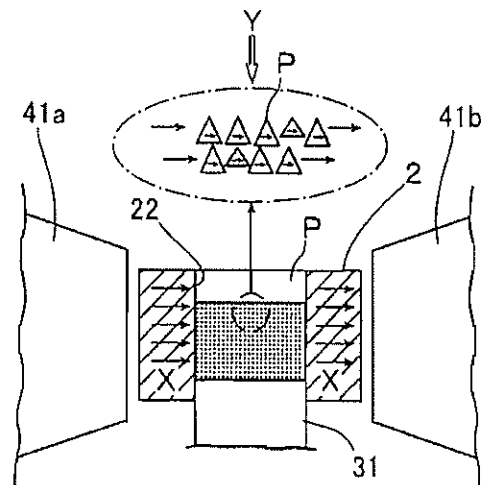


Fig.5(b)

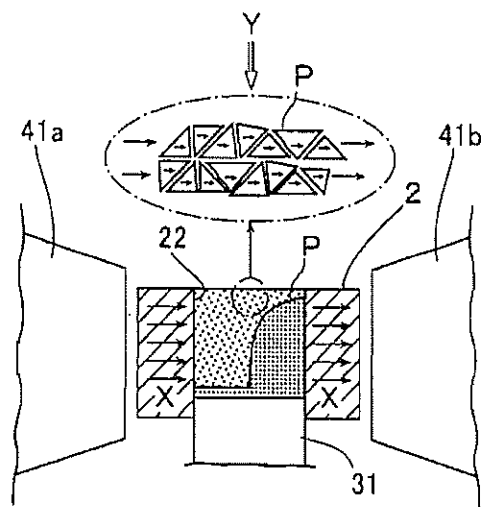


Fig.7

Fig.7 is a schematic cross-sectional view of a mechanical assembly. The assembly is vertically oriented and symmetrical about a central axis. At the top, a component 180 is mounted on a base 10. Below this is a horizontal plate 160. A central vertical shaft 170 passes through the assembly. A component 320 is mounted on the shaft 170, with a downward arrow 'Y' indicating its movement. Below 320 is a component 520. A dashed line 540 indicates a path or boundary. A component 50 is shown with a dashed line 540 and a solid line 510. A component 530 is shown with a dashed line 540. A component 550 is shown with a dashed line 540. A component 210 is shown with a dashed line 540. A component 550a is shown with a dashed line 540. A component 20 is shown with a dashed line 540. A component 42a is shown with a dashed line 540. A component 42b is shown with a dashed line 540. A component 41a is shown with a dashed line 540. A component 41b is shown with a dashed line 540. A component 130 is shown with a dashed line 540. A component 310 is shown with a dashed line 540. A component 120 is shown with a dashed line 540. A component 110 is shown with a dashed line 540. A component 140 is shown with a dashed line 540. A component 150 is shown with a dashed line 540. A horizontal arrow 'X' indicates movement to the right. A vertical arrow 'Y' indicates movement downwards.

Fig.8

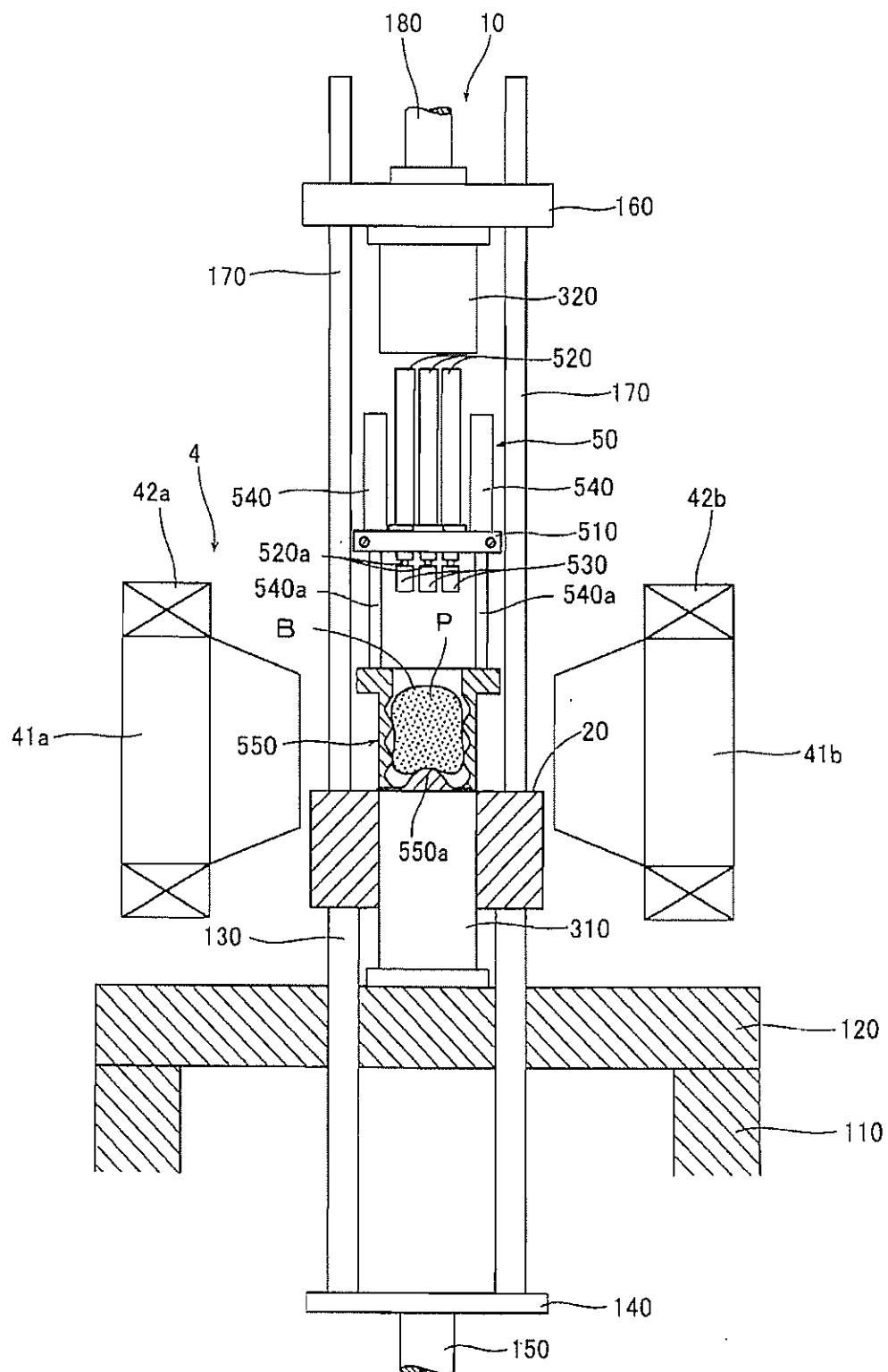


Fig.9

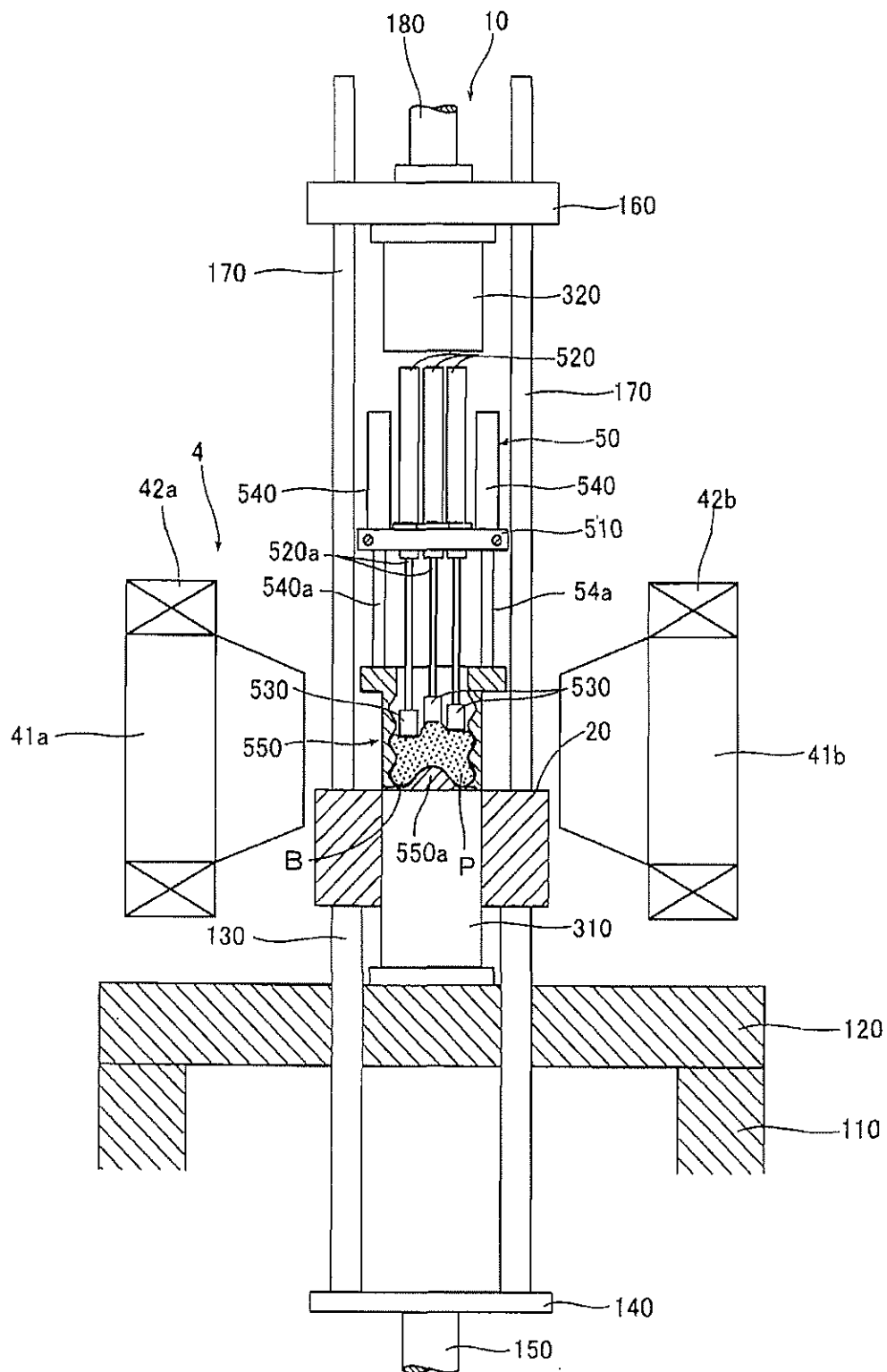


Fig.10(a)

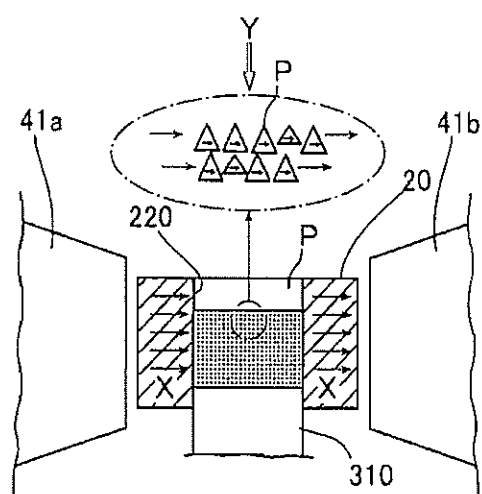


Fig.10(b)

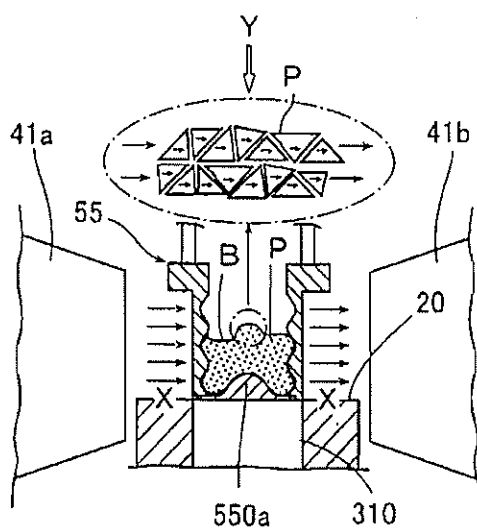


Fig.12(a)

Pressing step	Shape of pusher	Lateral movement of pusher	Total number of pressing of pusher	Front end shape of pusher	Material of pusher	Vertical vibration
I	25 × 50	No	1	Square	Cast iron	No
II	25 × 50	No	1	Square	SUS304	No
III	25 × 50	Yes	2	Square	SUS304	No
IV	35 × 50	Yes	4	Square	Nylon	No
V	10 × 10	Yes(vertical•lateral)	25	Square	Nylon	No
VI	10 × 10	Yes(vertical•lateral)	50	45deg•pyramid	PEEK	No
VII	10 × 10	Yes(vertical•lateral)	50	45deg•pyramid	PEEK	Yes
VIII	No	No	0	—	—	—

Fig.12(b)

	Pressing step	Kind of powder	Addition of solid lubricant	Br(kG)	(BH)max (MG0e)	iHc(k0e)	Degree of orientation (%)
Example	I	B	Yes	14.5	51.5	14.2	95
	II	B	Yes	14.7	53.0	14.1	96
	III	B	Yes	14.8	53.7	14.0	97
	IV	B	Yes	15	55.1	14.1	98
	V	B	Yes	15.1	55.9	14.2	99
	VI	B	Yes	15.1	55.8	14.1	99
	VI	B	No	14.8	53.7	14.1	97
	VII	B	Yes	15.2	56.6	14.2	99.5
Comparative example	VIII	B	Yes	14.4	50.8	14.1	94
	VIII	B	No	14.2	49.4	14.2	93
Example	VI	A	Yes	15	55.0	13.2	98
Example	VI	C	Yes	15.2	56.8	14.8	99.5

Fig.13

	Kneading	Kind of powder	Addition of lubricant	Br(kG)	(BH)max (MG0e)	iHc(k0e)	Degree of orientation (%)
Example	Yes	B	No	14.6	52.5	14.2	96
	Yes	B	Yes	15.0	55.0	14.2	98
	Yes	A	Yes	14.8	53.7	13.2	97
	Yes	C	Yes	15.2	56.8	14.8	99.5
Comparative example	No	B	Yes	14.4	50.8	14.1	94
	No	B	No	14.2	49.4	14.1	93