

FIGURE 1A

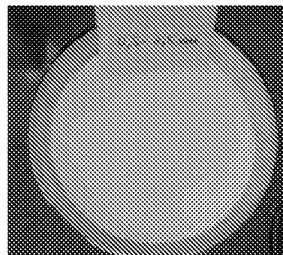


FIGURE 1B

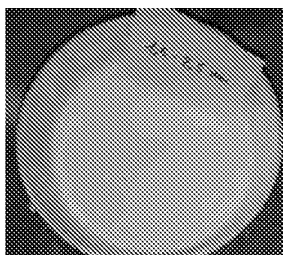


FIGURE 1C

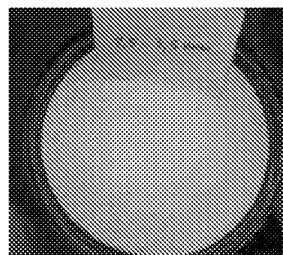


FIGURE 1D

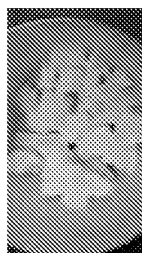


FIGURE 2

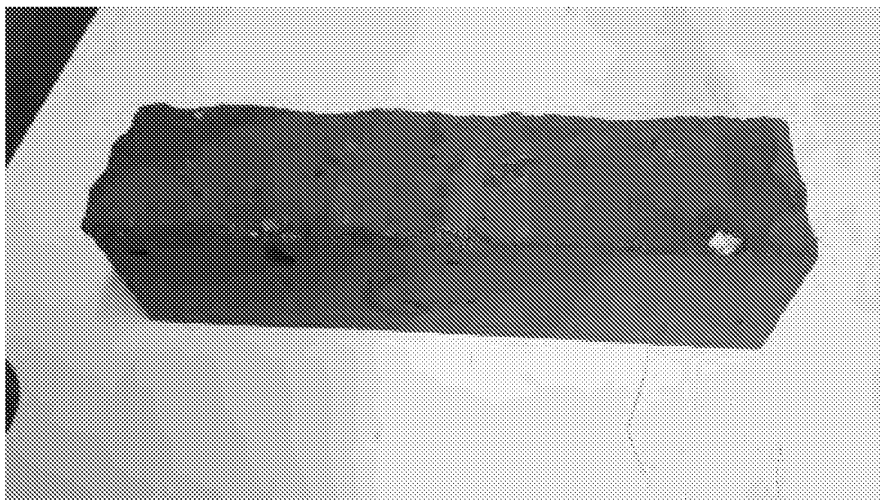


FIGURE 3A

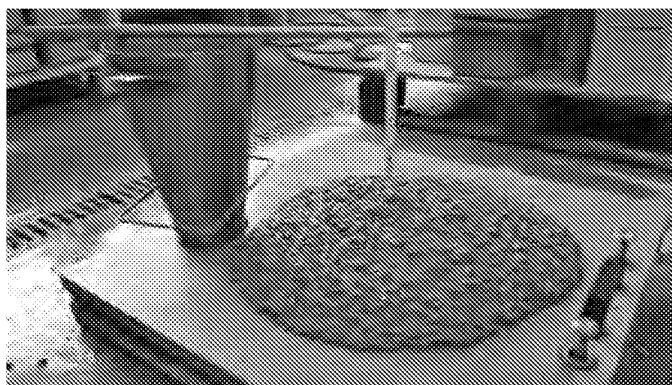


FIGURE 3B

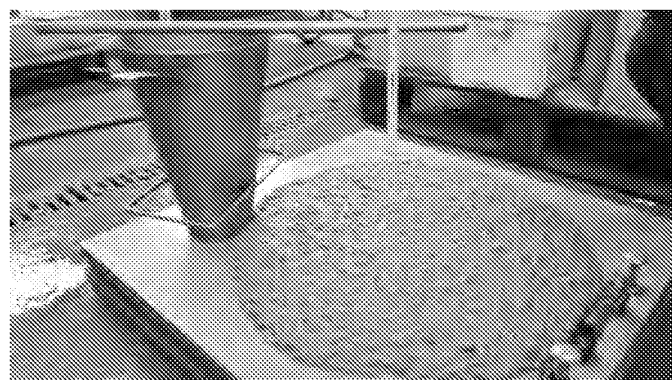


FIGURE 4

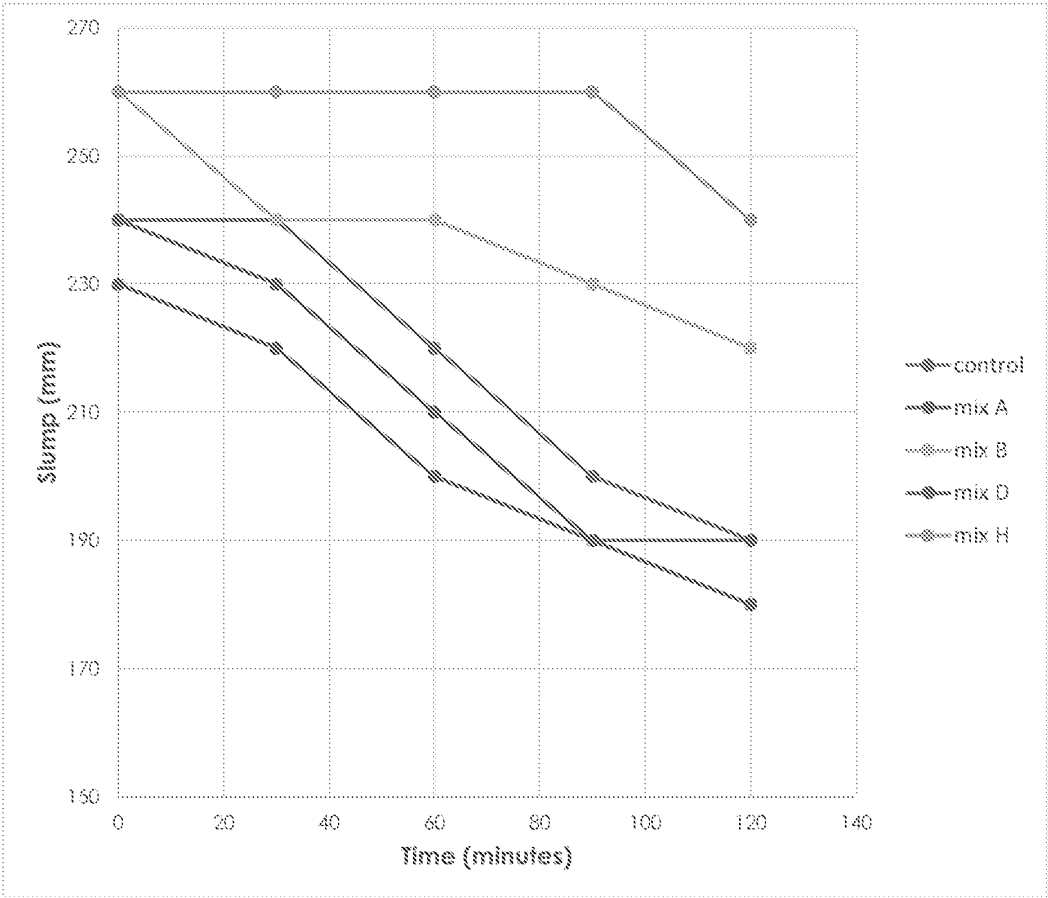
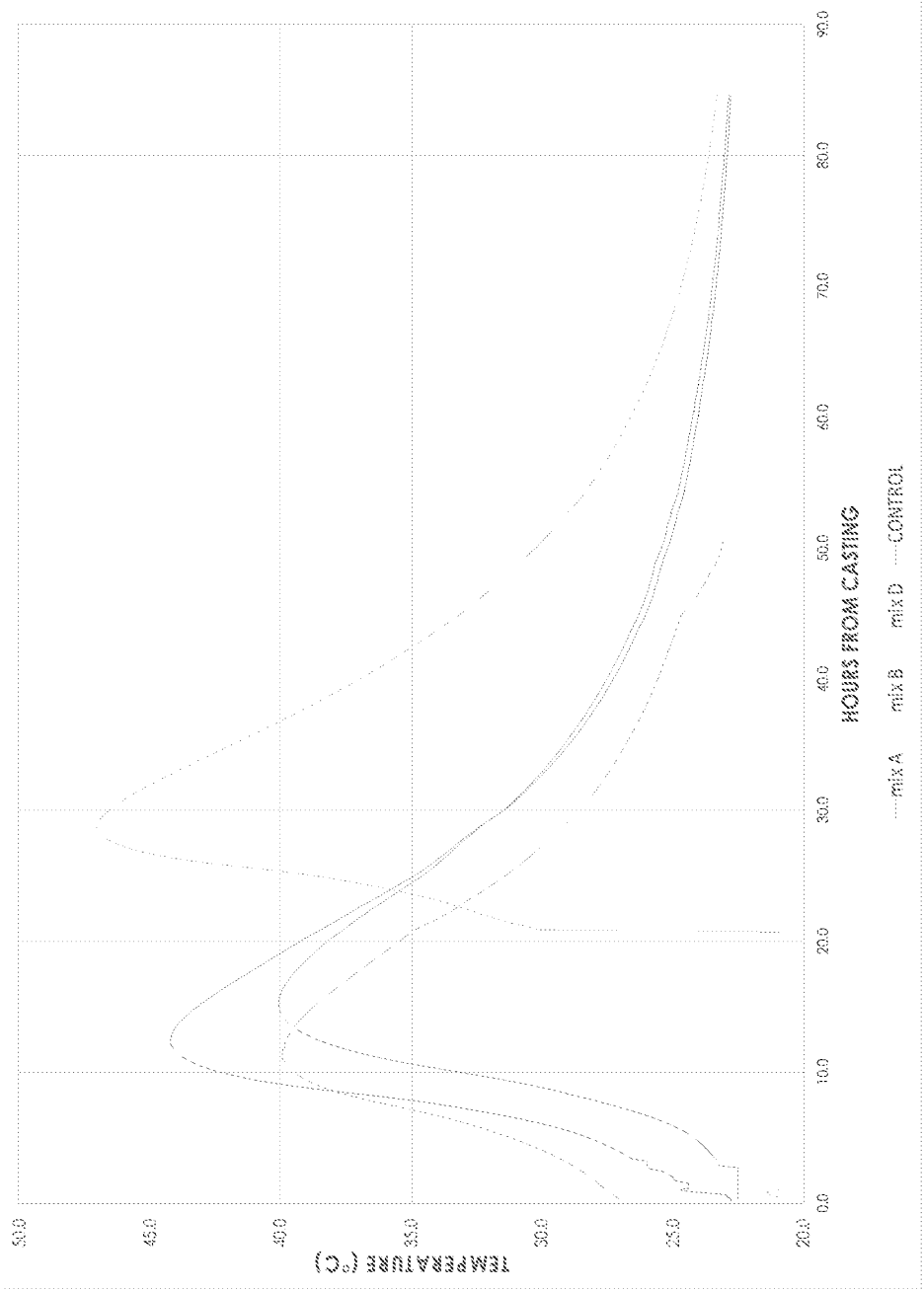


FIGURE 5



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FIGURE 6

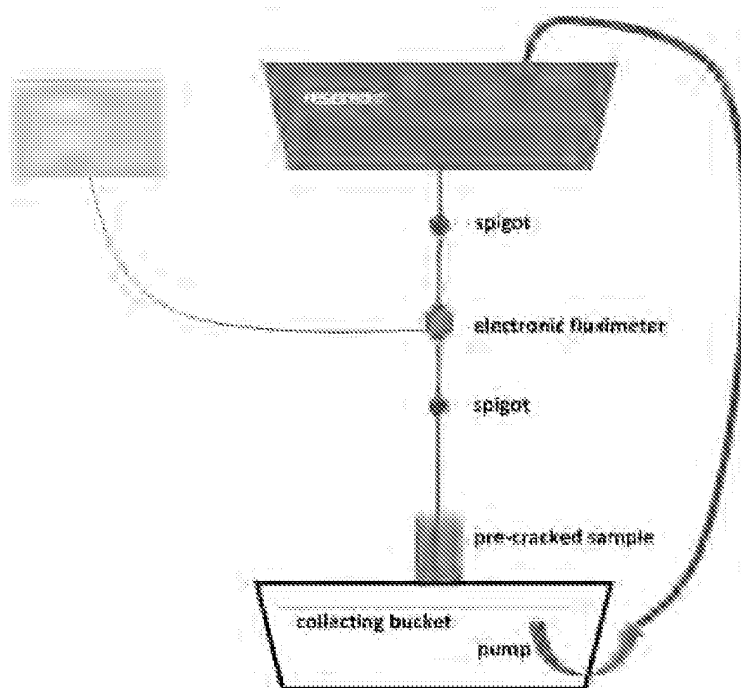


FIGURE 7

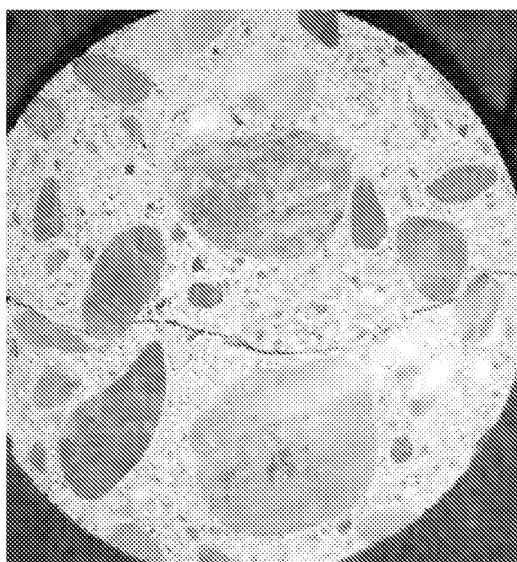


FIGURE 8A



FIGURE 8B

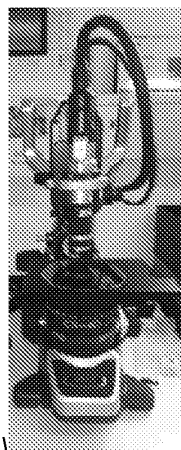


FIGURE 9

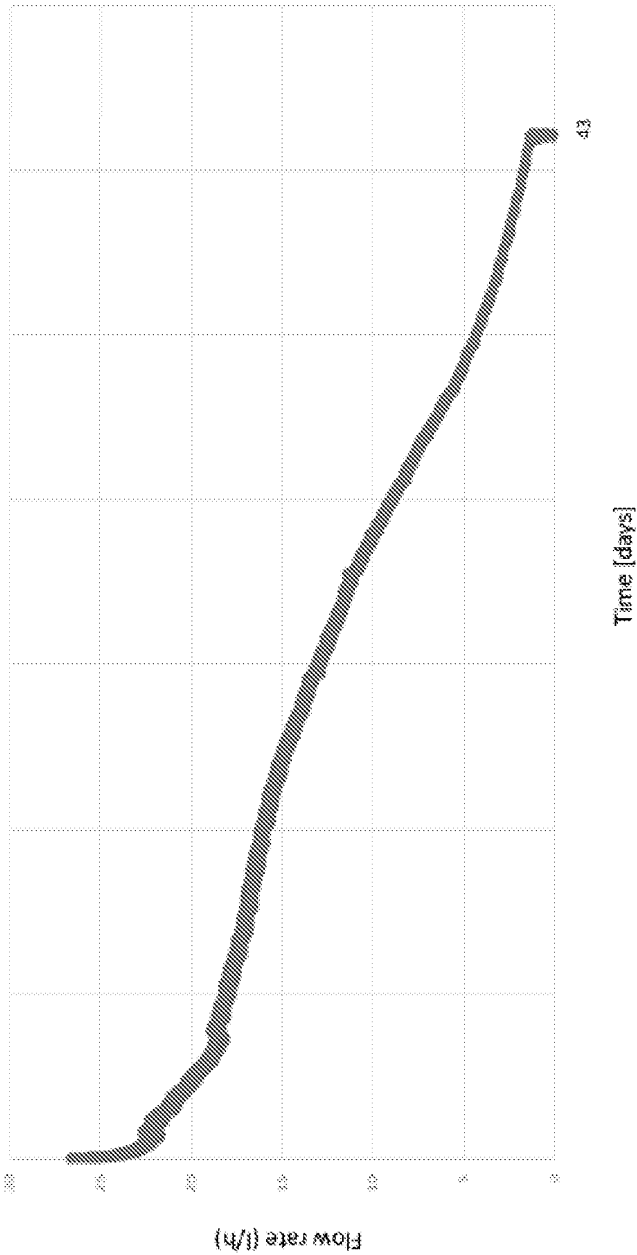


FIGURE 10

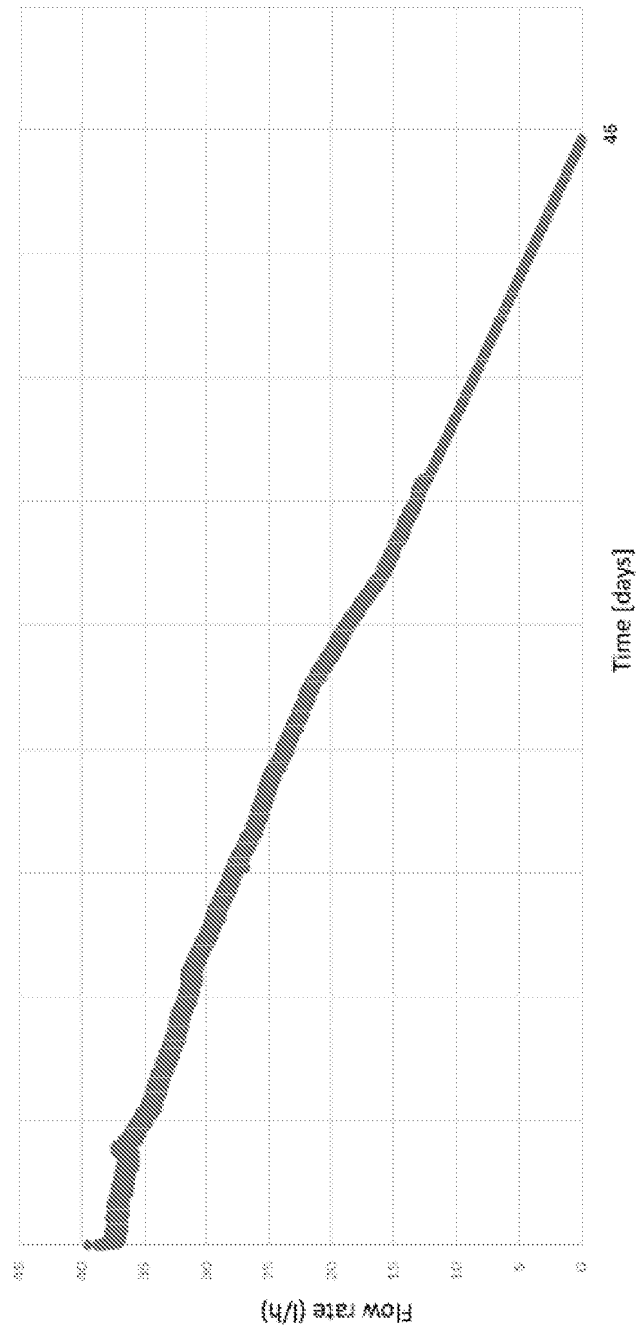


FIGURE 11

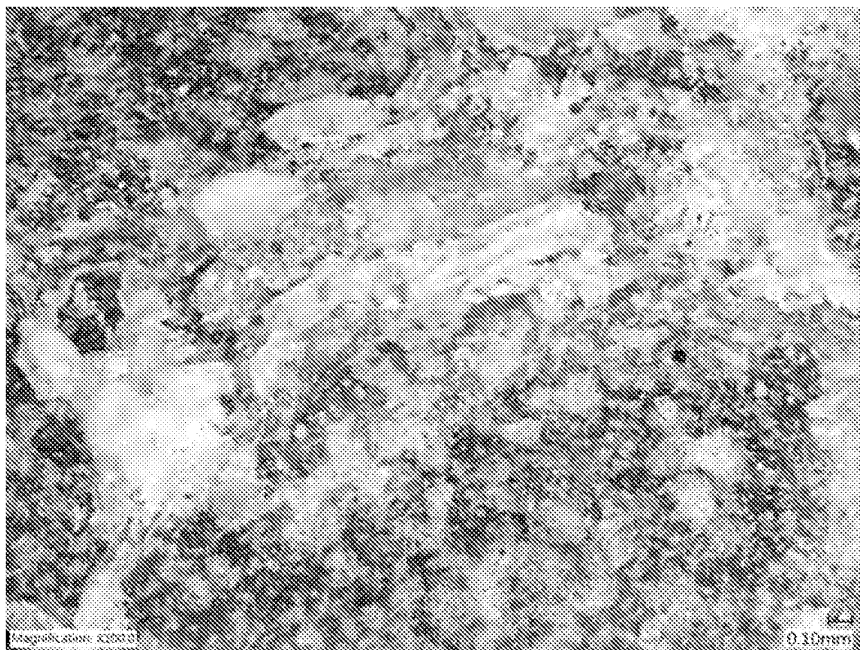


FIGURE 12

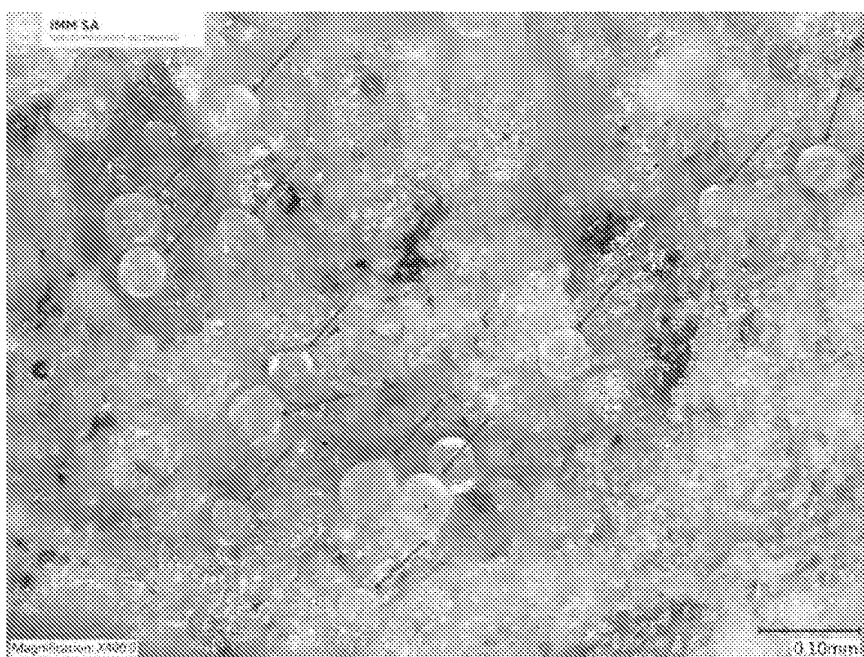


FIGURE 13

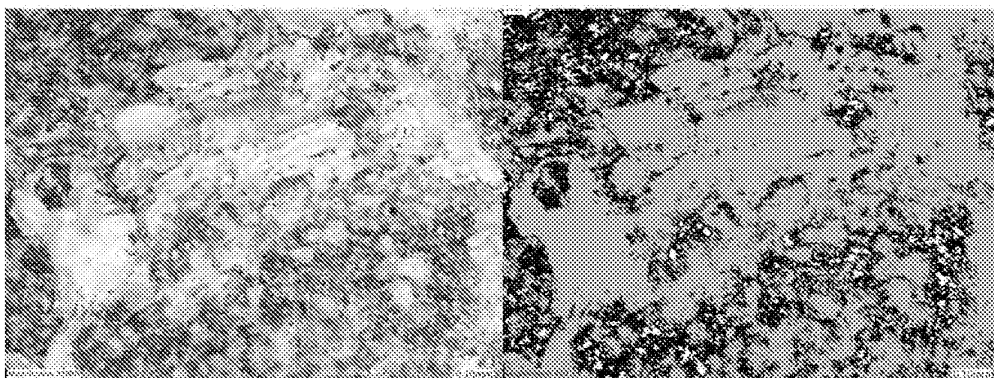


FIGURE 14

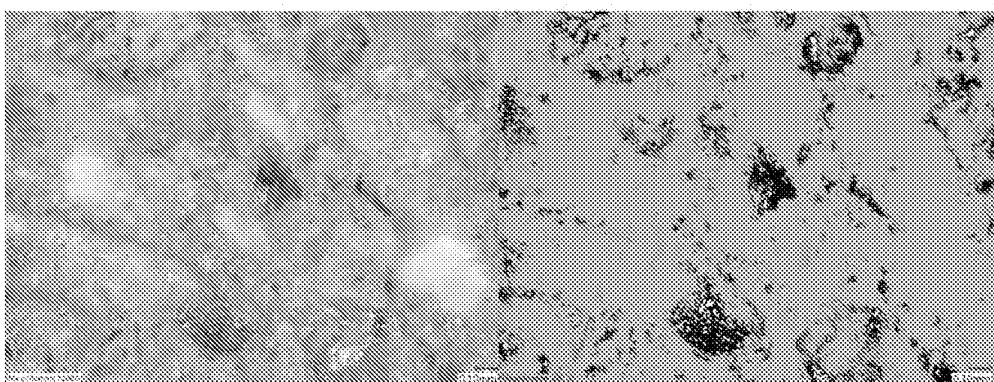


FIGURE 15

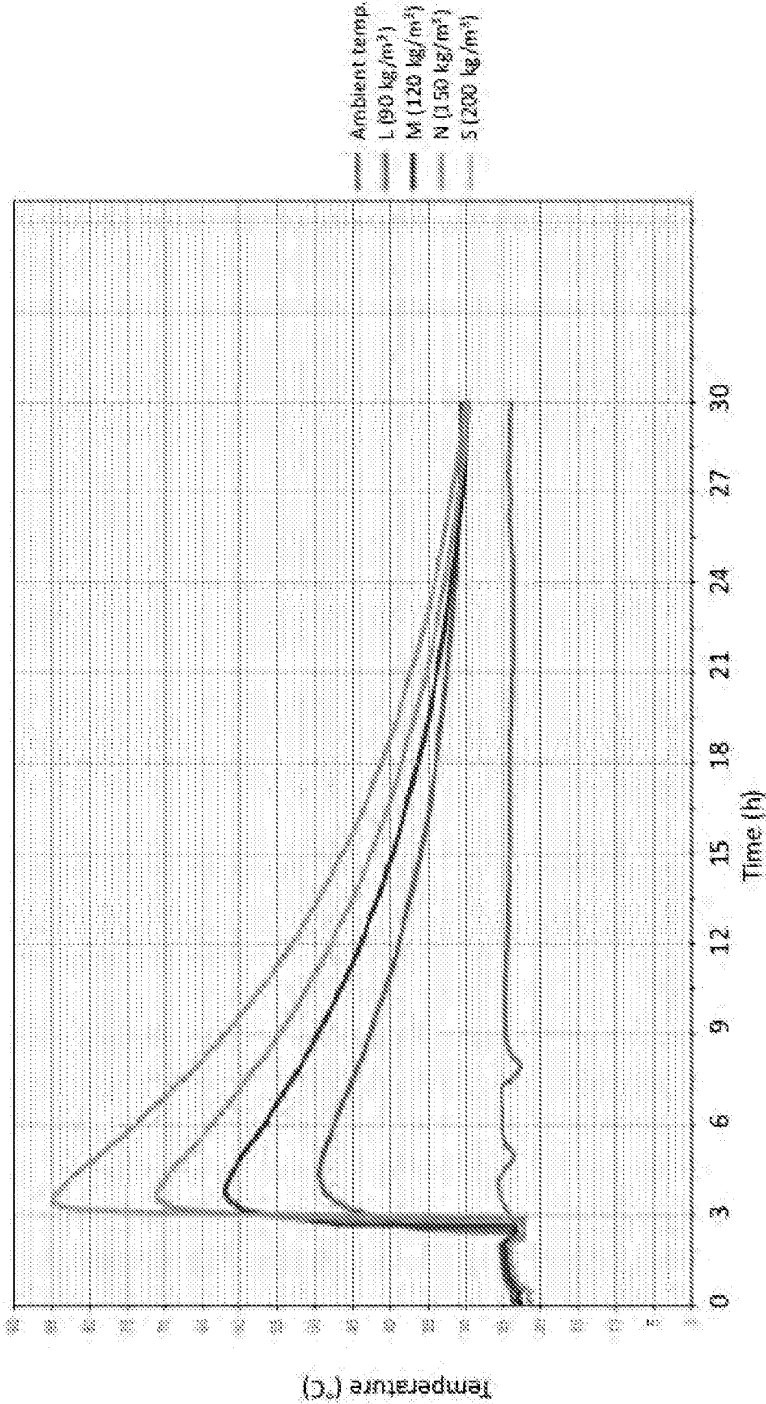


FIGURE 16A

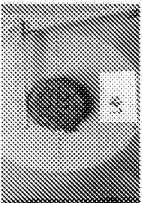
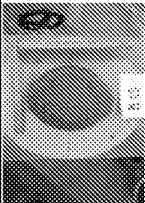
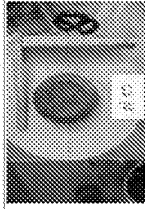
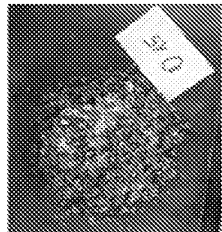
SUMMARY OF TEST RESULTS - NEW MIXES FOR HEAT OF HYDRATION TEST (kg/m ³)														
ID	MIX	CEM	FLY ASH	CaO (mm) (0.5-1.5)	CaO (mm) (1.5-2.5)	CaO (mm) (2.5-3.5)	WATER	SUPER-PLASTICIZER	SAND	VISUAL INSPECTION	Flow (mm)	Initial temperature after mixing	Measured peak temperature	Remarks
13	L	280	120	0	0	90	180	20	1583		110		49.4	Fairly workable mix. Good surface hardness after hardening.
14	M	280	120	0	0	120	180	20	1553		160	43	62.0	Workable mix. Good surface hardness after hardening.
15	N	280	120	0	0	150	180	20	1623		125	50	71.0	Workable mix. Good surface hardness after hardening.
16	O	280	120	0	0	340	180	20	1433		110	61	--	Fairly workable mix. Poor cohesion after hardening.

FIGURE 16B

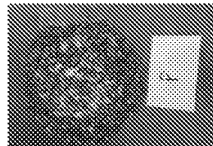
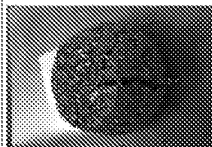
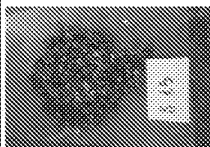
SUMMARY OF TEST RESULTS - NEW MIXES FOR HEAT OF HYDRATION TEST (kg/m ³)														
ID	MIX	CEM	FLY ASH	CaO (mm) (0.5-1.5)	CaO (mm) (1.5-2.5)	CaO (mm) (2.5-3.5)	WATER	SUPER-PLASTICIZER	SAND	VISUAL INSPECTION	Flow (mm)	Initial temperature after mixing (°C)	Measured peak temperature (°C)	Remarks
17	P	280	120	0	0	540	180	20	1233		NO FLOW	99.3	-	Not workable mix. Low surface hardness after hardening.
18	Q	460	80	0	0	340	269	0	1000	--	NO FLOW	63	-	Not workable mix. Low surface hardness after hardening.
19	R	460	80	0	0	340	269	20	1000		NO FLOW	63	-	Not workable mix. Low surface hardness after hardening.
20	S	280	120	0	0	200	180	20	1600		130	57.5	85.0	Fairly workable mix. Low surface hardness after hardening.

FIGURE 17

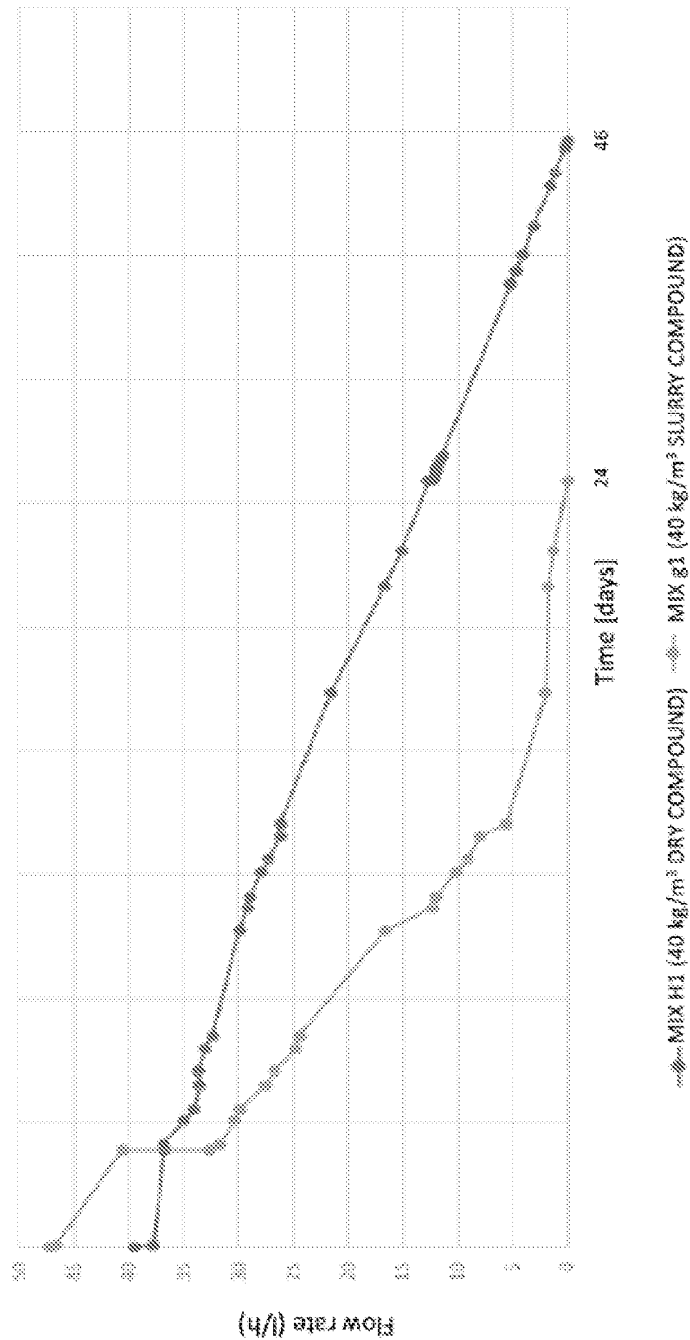


FIGURE 18

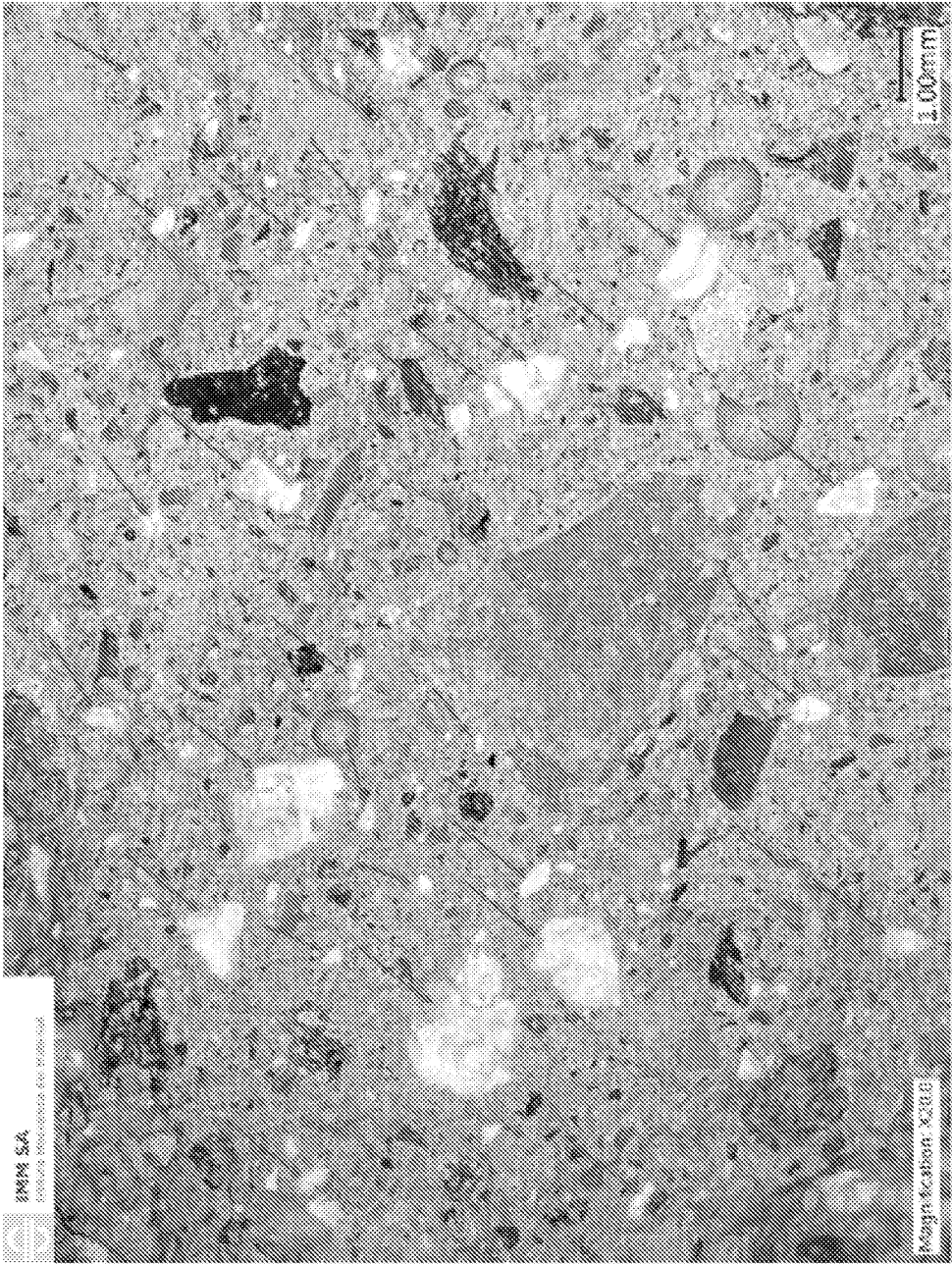


FIGURE 19

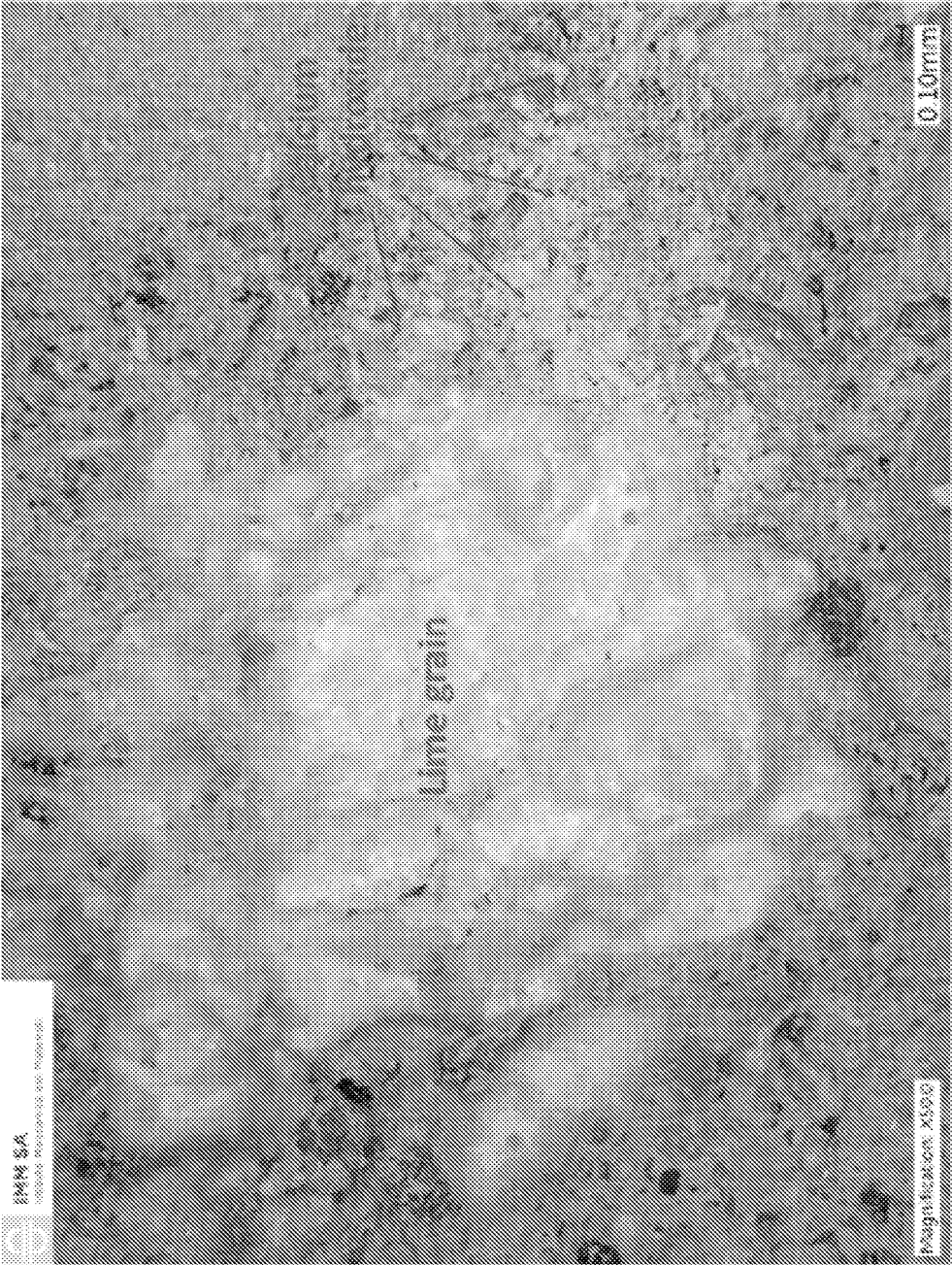


FIGURE 20

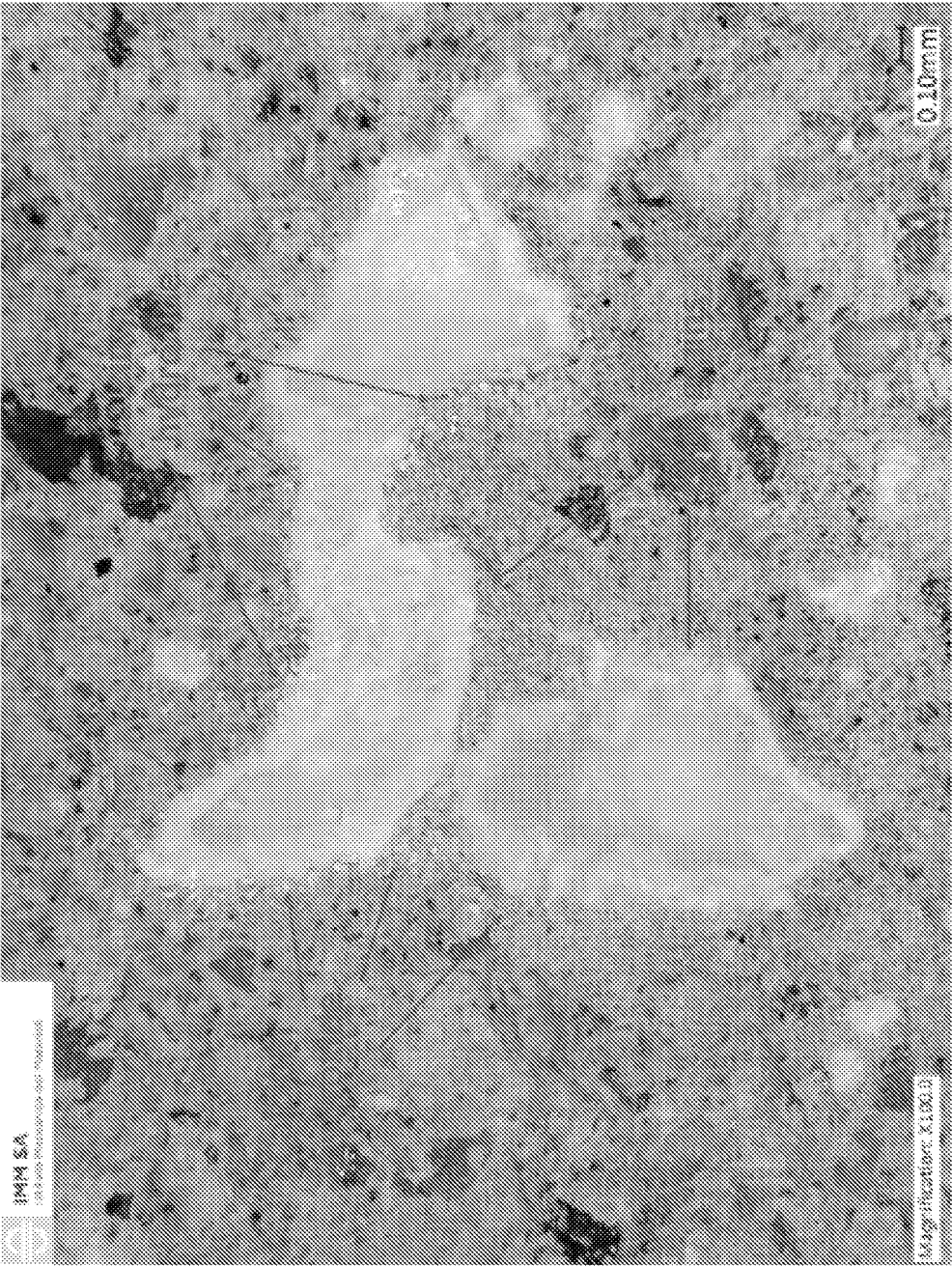


FIGURE 21

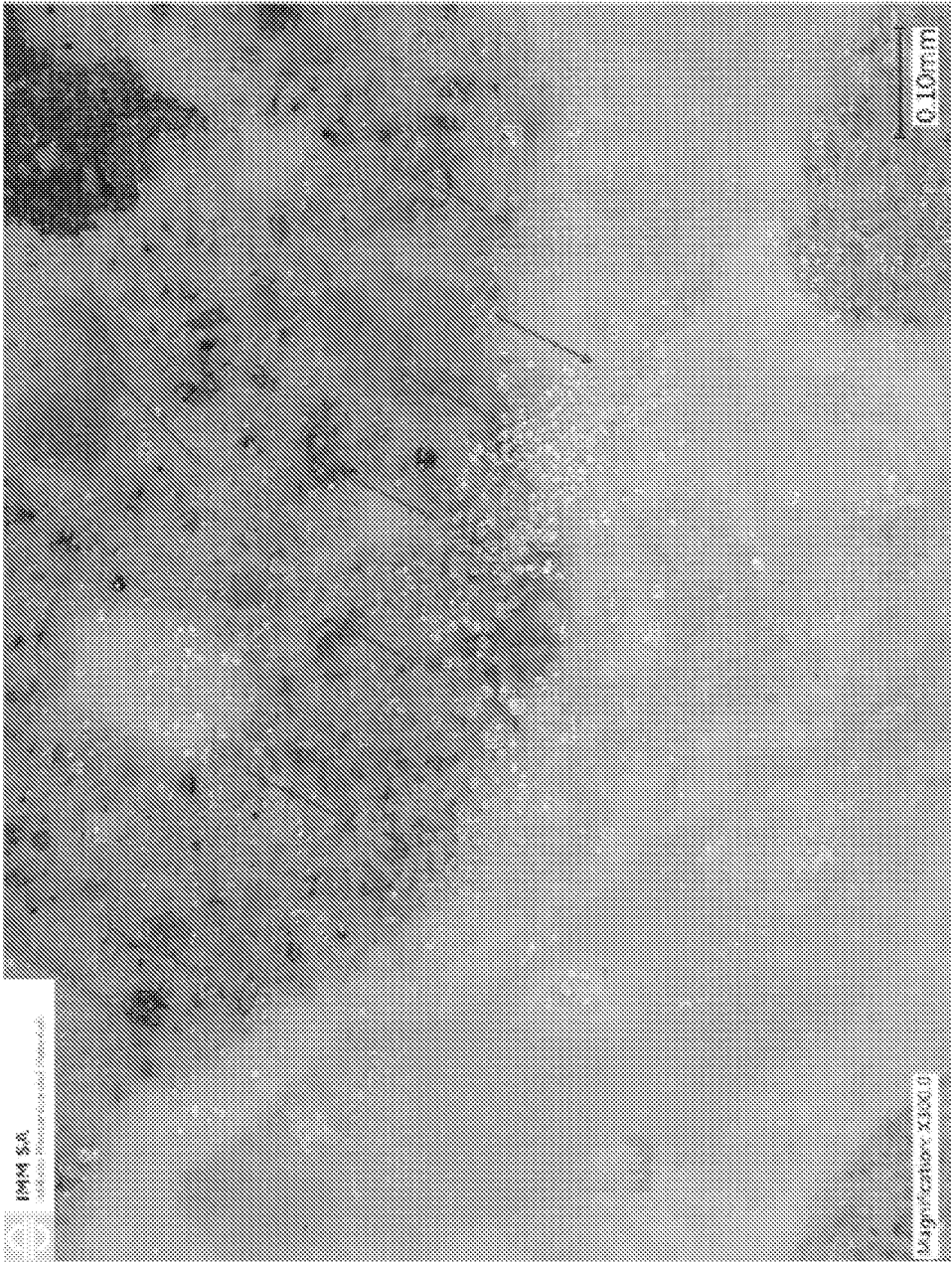


FIGURE 22

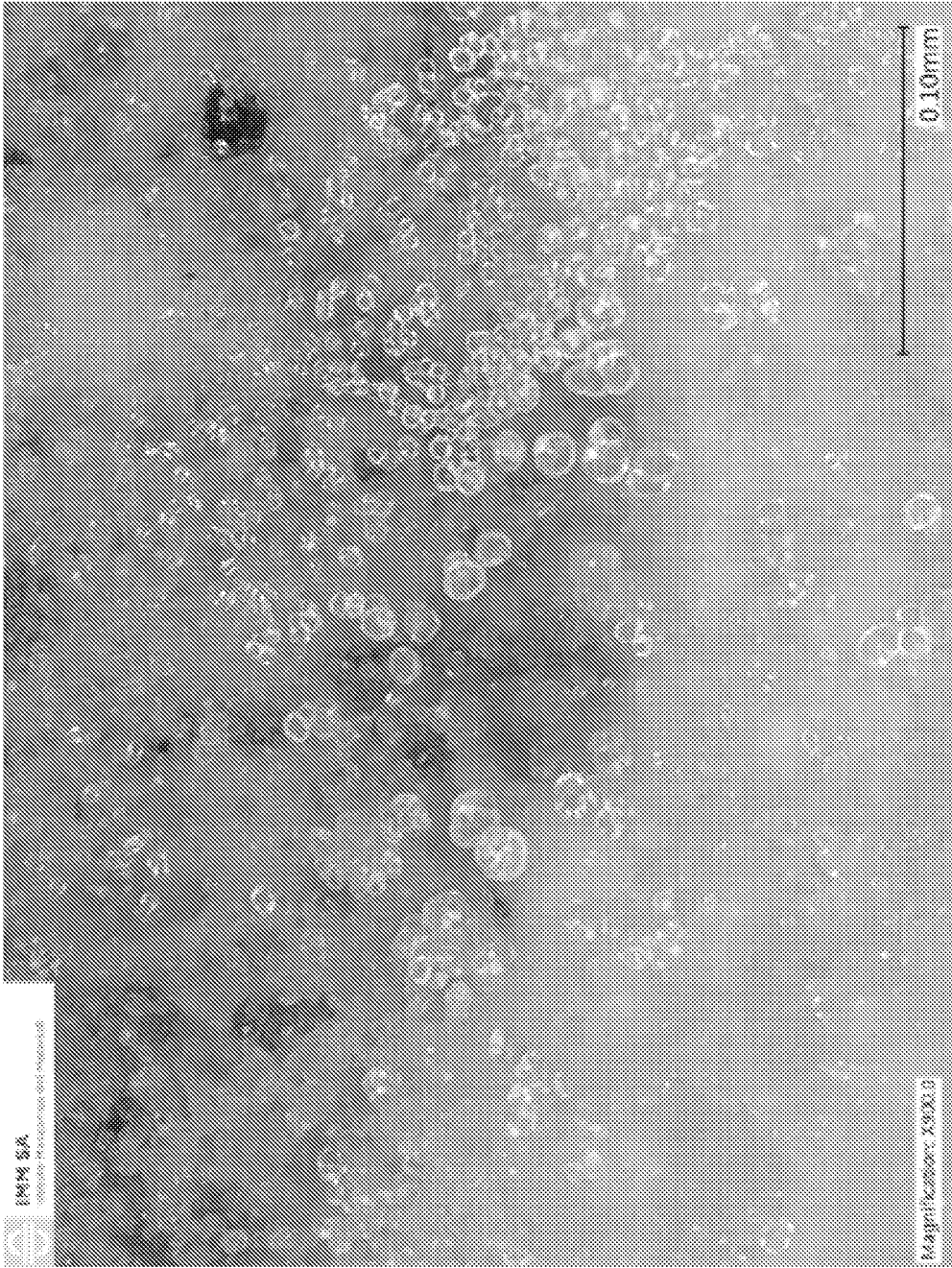


FIGURE 23

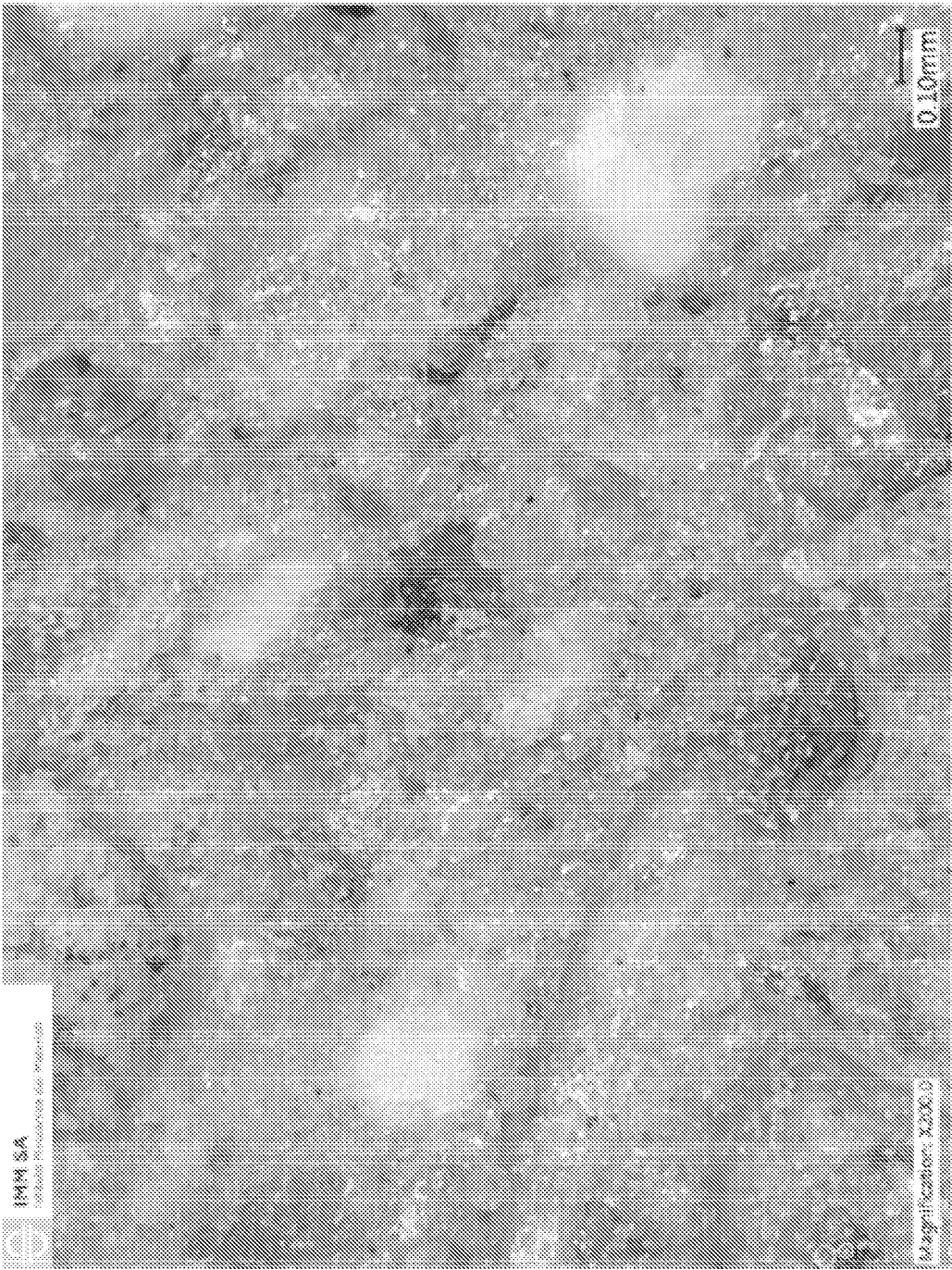


FIGURE 24

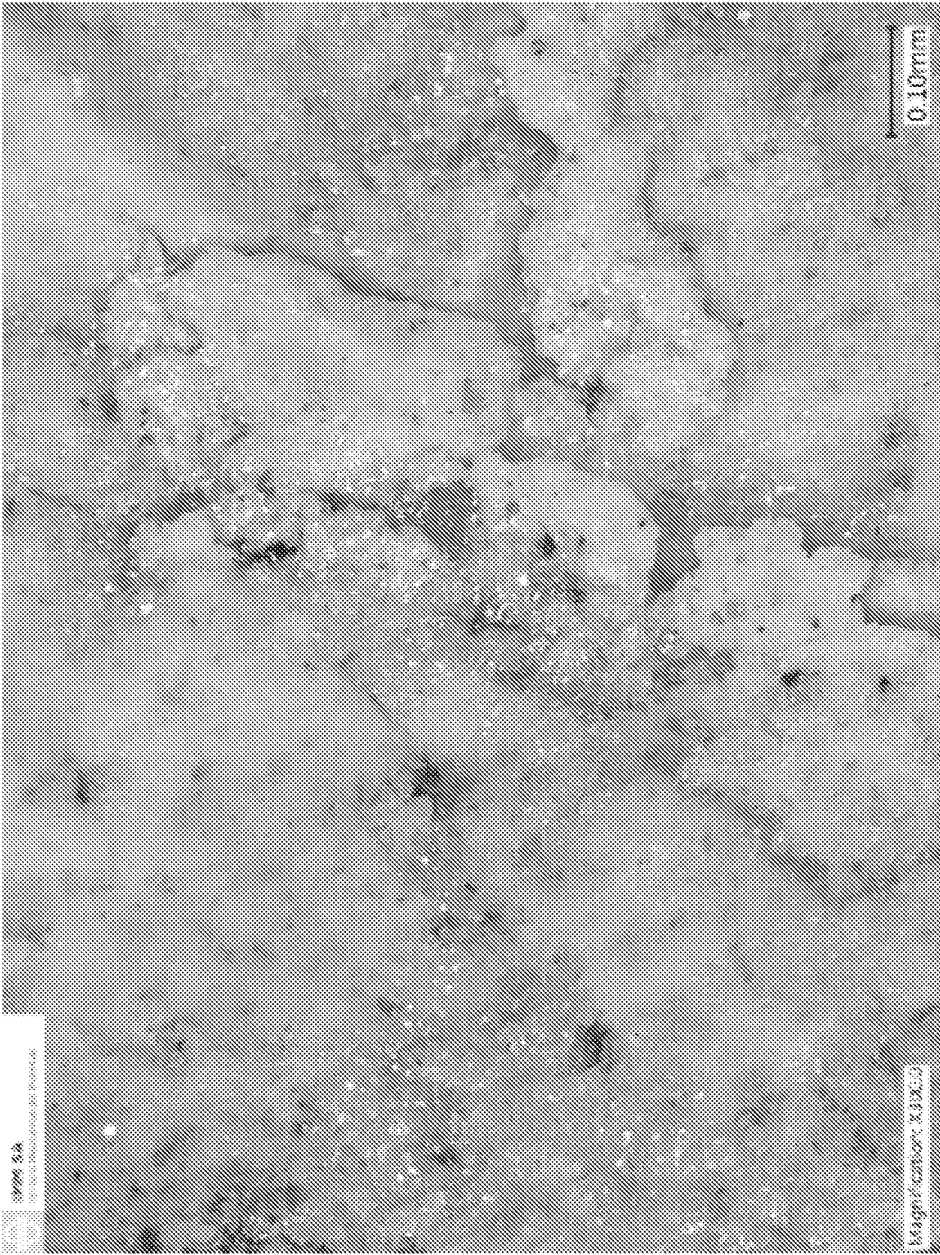


FIGURE 25



FIGURE 26

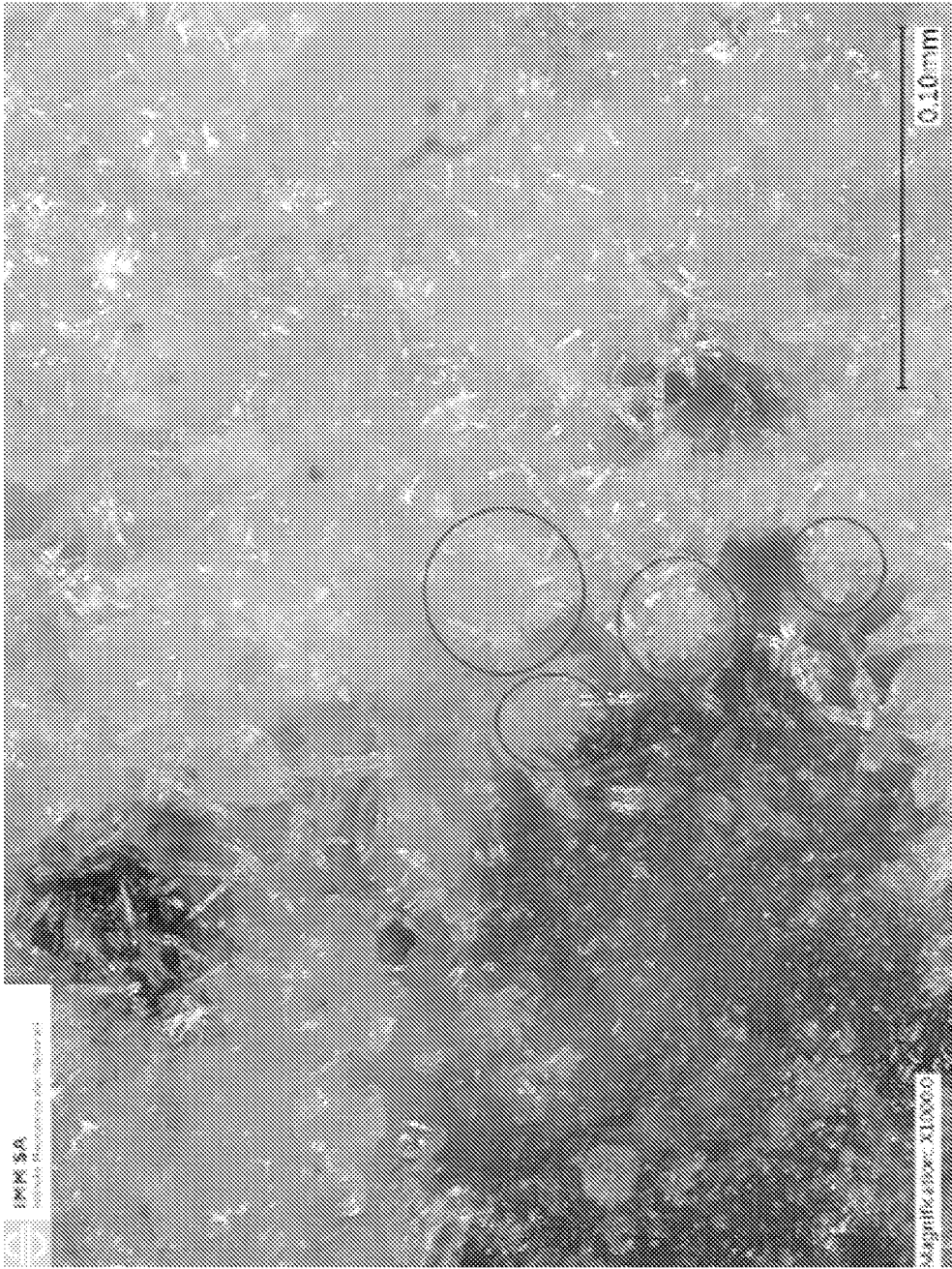


FIGURE 27



FIGURE 28A

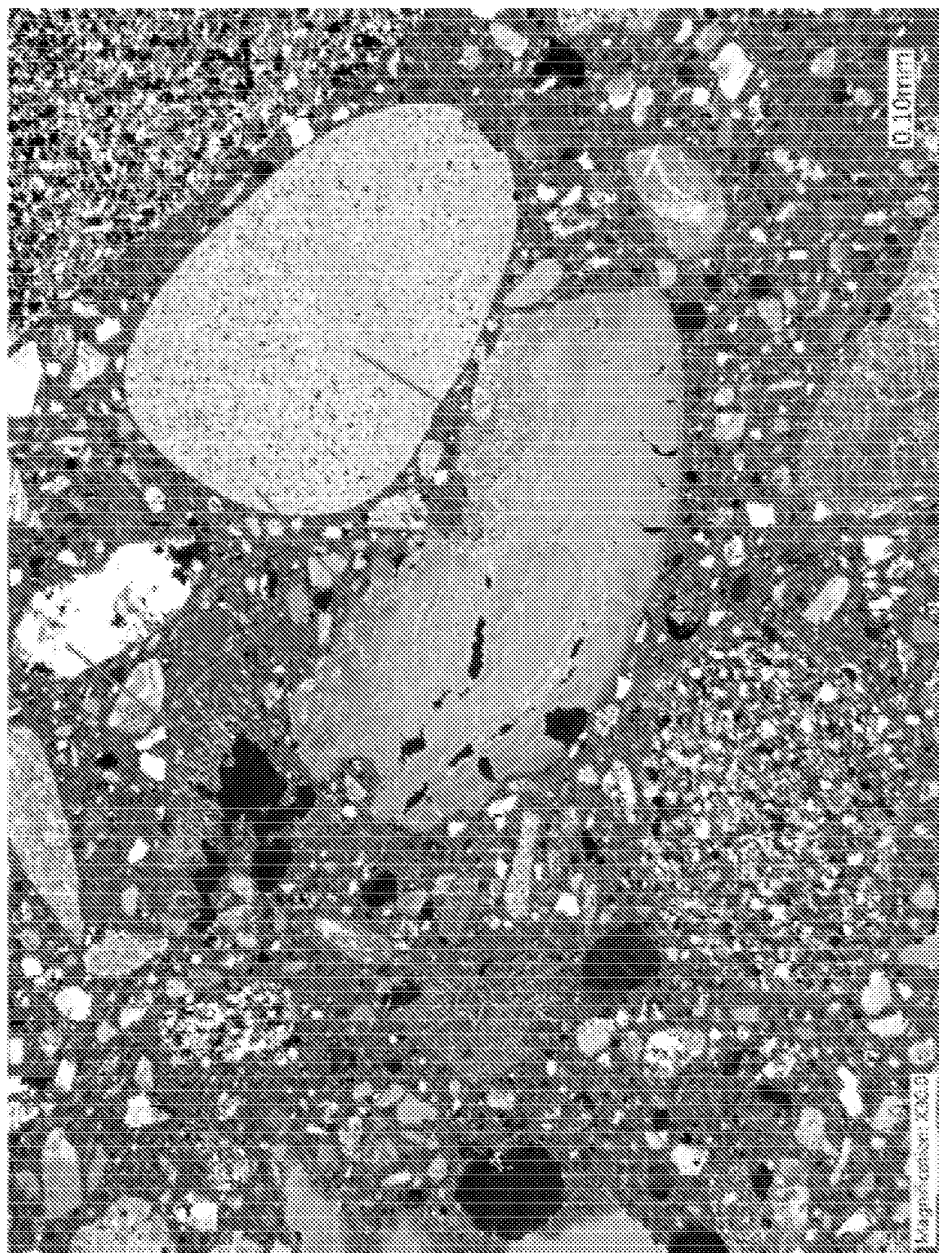


FIGURE 28B

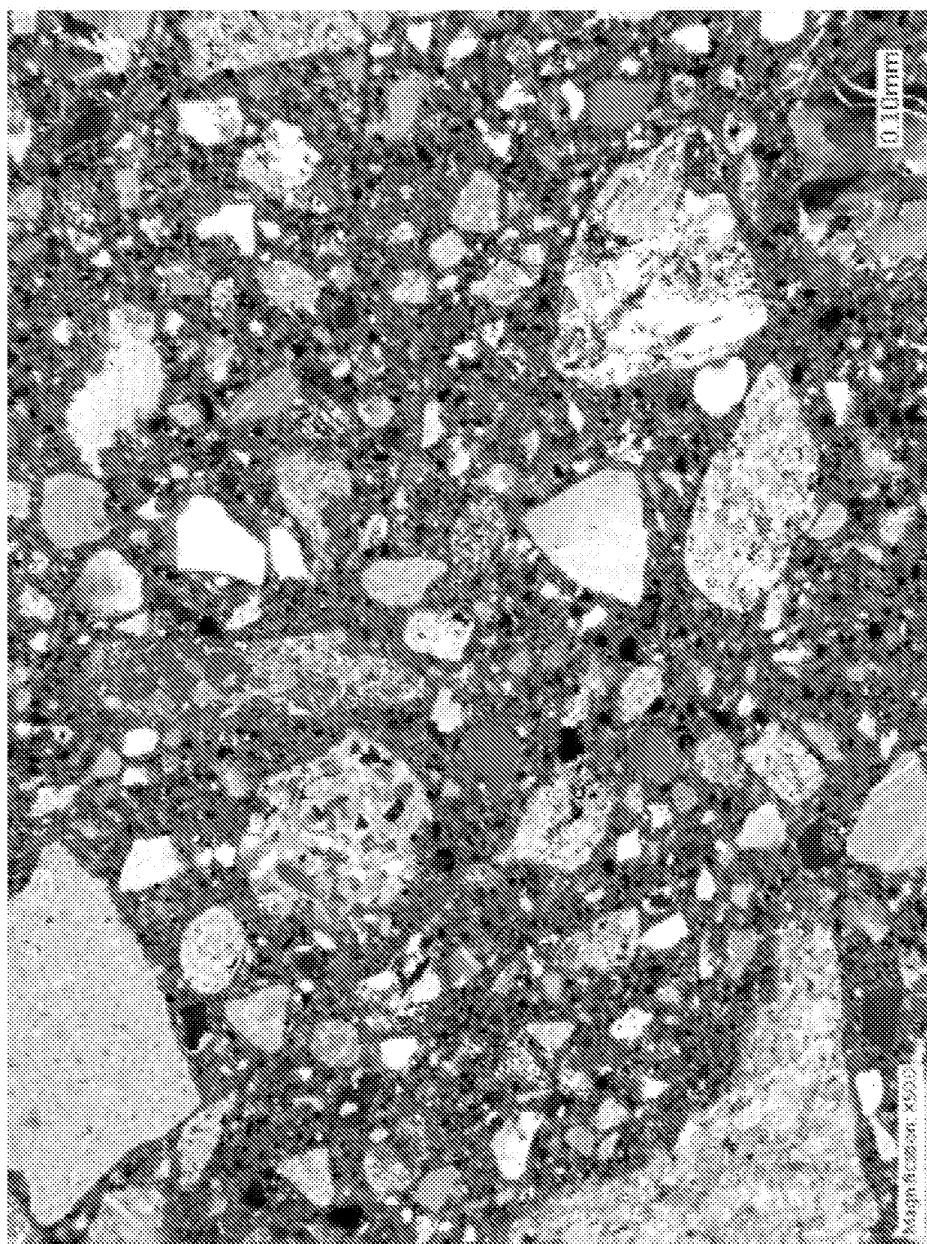
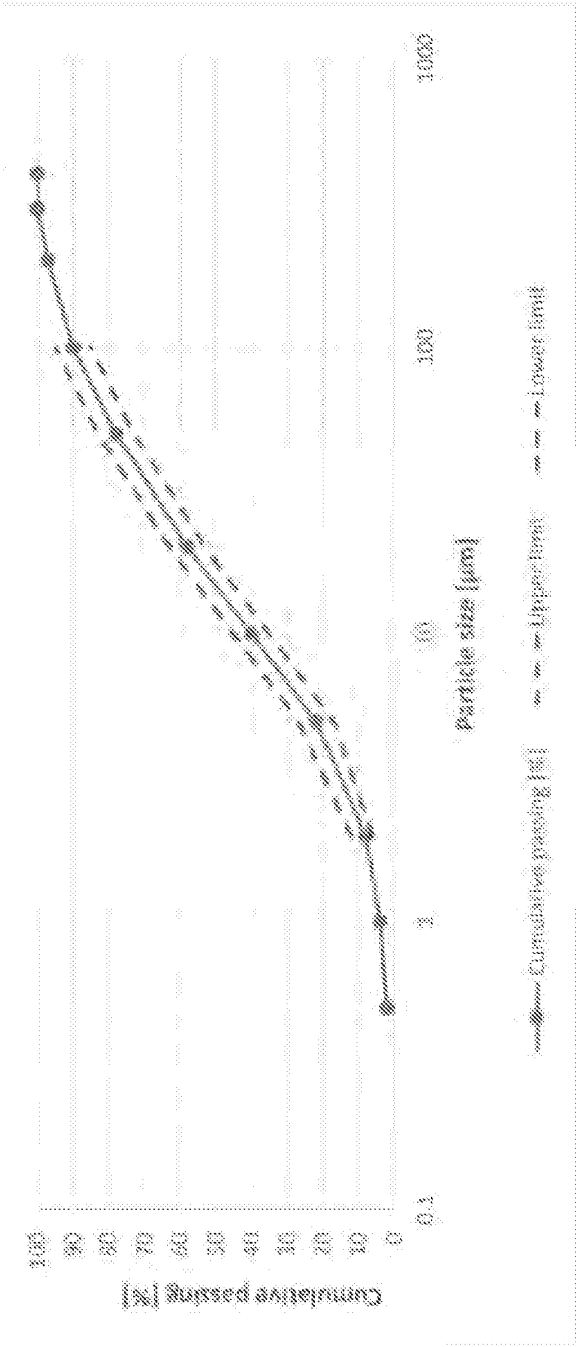


FIGURE 29

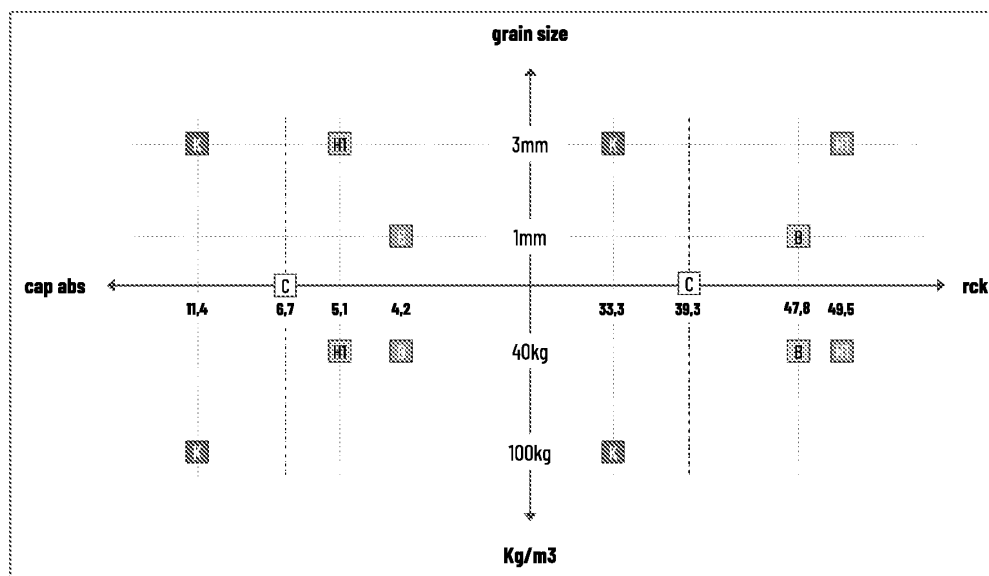
Compound Dosage	Total binder content (CEM+SCM)							
	200 kg/m ³	300 kg/m ³	400 kg/m ³	500 kg/m ³	600 kg/m ³	700 kg/m ³	800 kg/m ³	900 kg/m ³
45.00%	100 kg/m ³	150 kg/m ³	200 kg/m ³	250 kg/m ³	300 kg/m ³	350 kg/m ³	400 kg/m ³	450 kg/m ³
40.00%	120 kg/m ³	180 kg/m ³	240 kg/m ³	300 kg/m ³	360 kg/m ³	420 kg/m ³	480 kg/m ³	540 kg/m ³
35.00%	140 kg/m ³	210 kg/m ³	280 kg/m ³	350 kg/m ³	420 kg/m ³	490 kg/m ³	560 kg/m ³	630 kg/m ³
30.00%	160 kg/m ³	240 kg/m ³	320 kg/m ³	400 kg/m ³	480 kg/m ³	560 kg/m ³	640 kg/m ³	720 kg/m ³
25.00%	180 kg/m ³	270 kg/m ³	360 kg/m ³	450 kg/m ³	540 kg/m ³	630 kg/m ³	720 kg/m ³	810 kg/m ³
20.00%	200 kg/m ³	300 kg/m ³	400 kg/m ³	500 kg/m ³	600 kg/m ³	700 kg/m ³	800 kg/m ³	900 kg/m ³
15.00%	220 kg/m ³	330 kg/m ³	440 kg/m ³	550 kg/m ³	660 kg/m ³	770 kg/m ³	880 kg/m ³	990 kg/m ³
10.00%	240 kg/m ³	360 kg/m ³	480 kg/m ³	600 kg/m ³	720 kg/m ³	840 kg/m ³	960 kg/m ³	1080 kg/m ³
5.00%	260 kg/m ³	390 kg/m ³	520 kg/m ³	650 kg/m ³	780 kg/m ³	910 kg/m ³	1040 kg/m ³	1170 kg/m ³
0.00%	280 kg/m ³	420 kg/m ³	560 kg/m ³	700 kg/m ³	840 kg/m ³	980 kg/m ³	1120 kg/m ³	1260 kg/m ³

FIGURE 30



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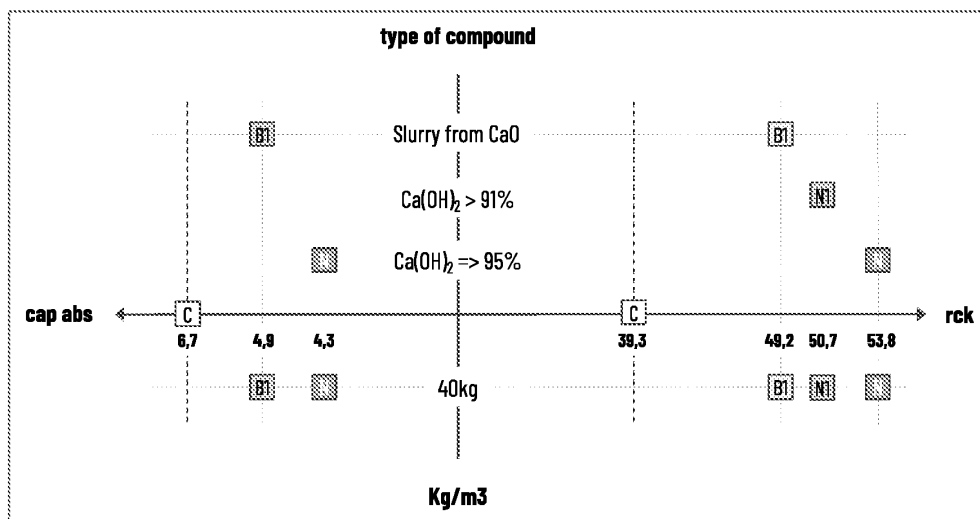
FIGURE 31



cap abs = capillary water absorption, SIA 262-1/A, average of 5 samples
 rck= compressive strength at 28 days, SN EN 12390-3, average of 3 samples
 grain size = average of size limits of compound grain size, in mm
 Kg/m3 = dosage of compound in kg per m3 of concrete

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FIGURE 32



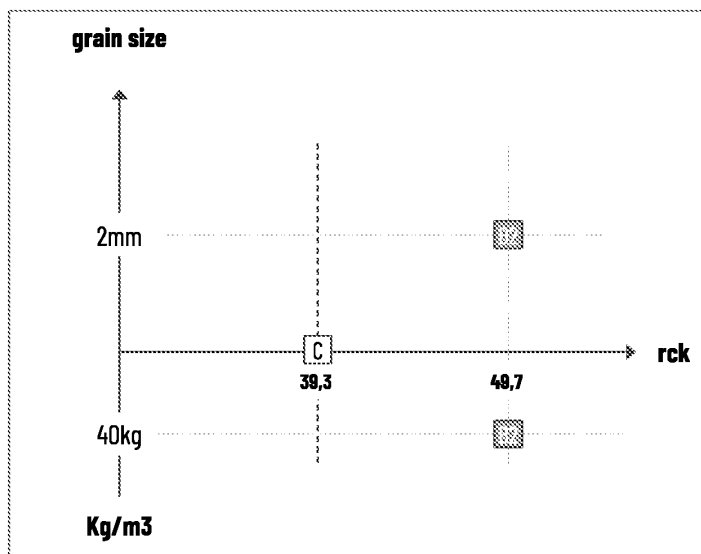
cap abs = capillary water absorption, SIA 262-1/A, average of 5 samples

rck= compressive strength at 28 days, SN EN 12390-3, average of 3 samples

type of compound = as described in the Example

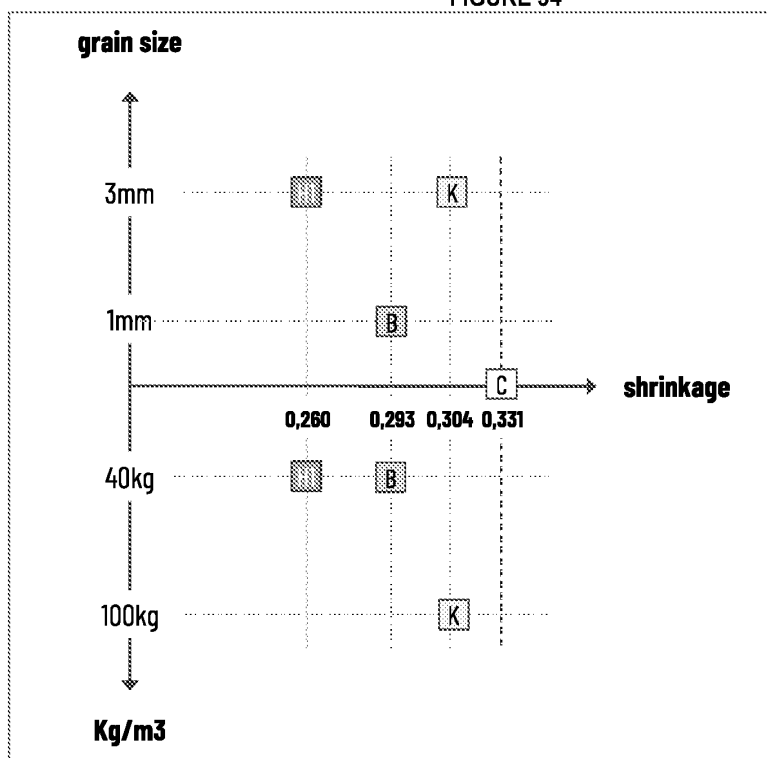
Kg/m3 = dosage of compound in kg per m3 of concrete

FIGURE 33



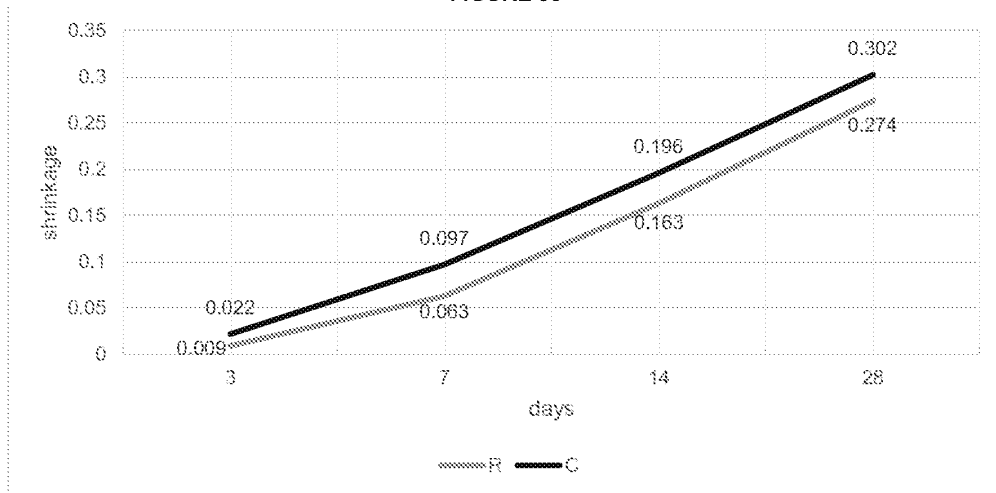
rck= compressive strength at 28 days, SN EN 12390-3, average of 3 samples
grain size = average of size limits of compound grain size, in mm
Kg/m³ = dosage of compound in kg per m³ of concrete

FIGURE 34



shrinkage = drying shrinkage at 91 days, SIA 262-1/F, average of 2 samples
 grain size = average of size limits of compound grain size, in mm
 Kg/m³ = dosage of compound in kg per m³ of concrete

FIGURE 35



shrinkage = drying shrinkage, SIA 262-1/F, average of 2 samples

day= days of test observation calculated from test start (day 0= 23 hours from specimen preparation)