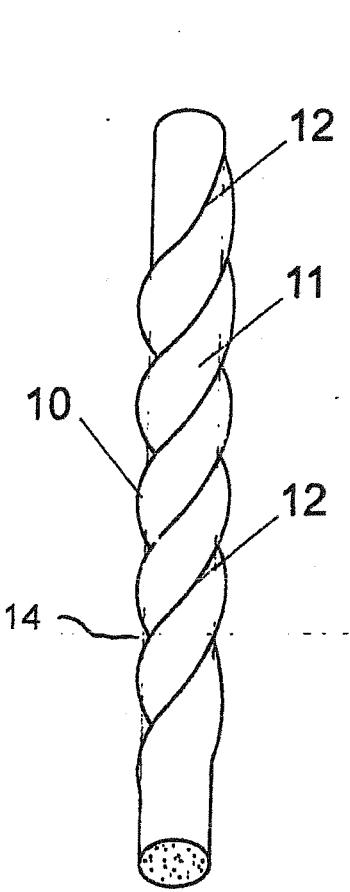




Tight wind

FIG 1

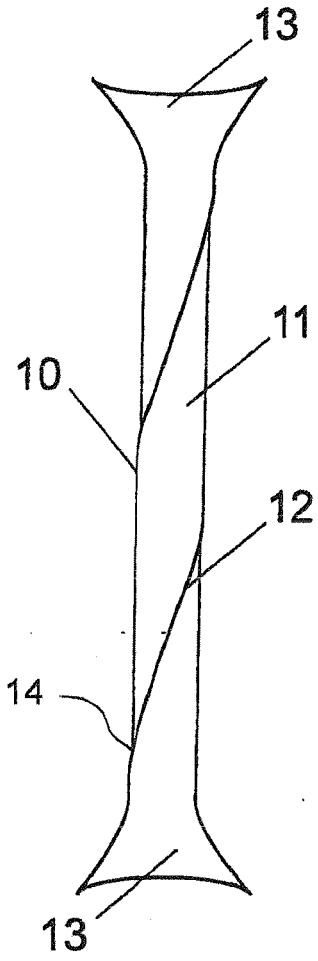


FIG 2

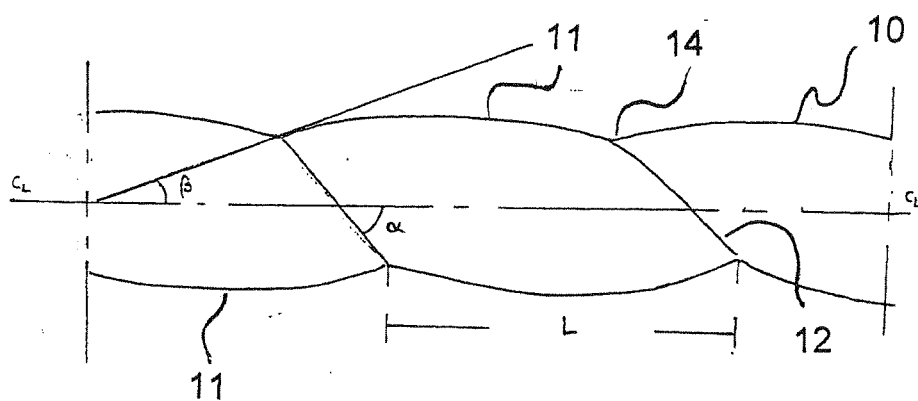


FIG 3

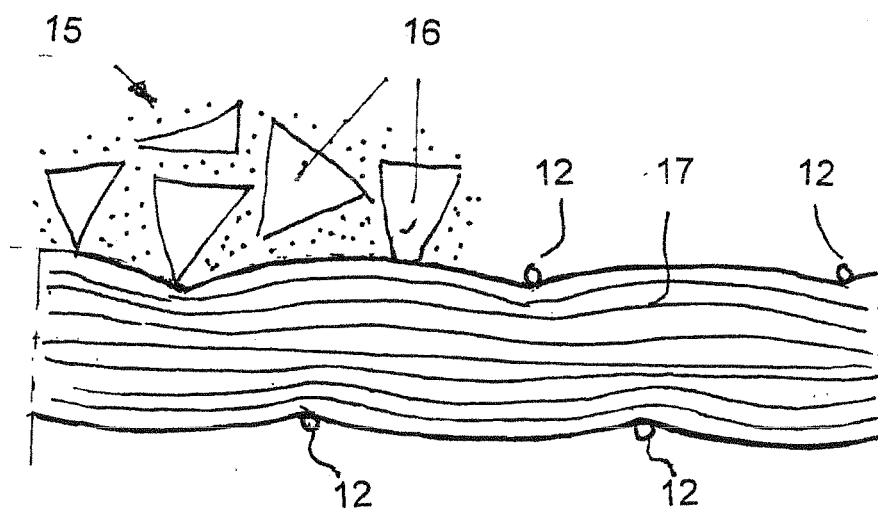


FIG 4

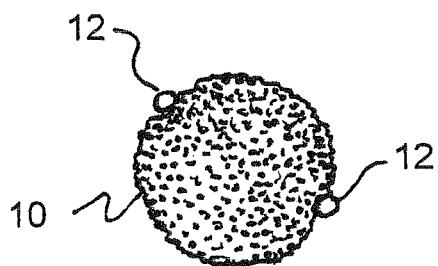


FIG 5

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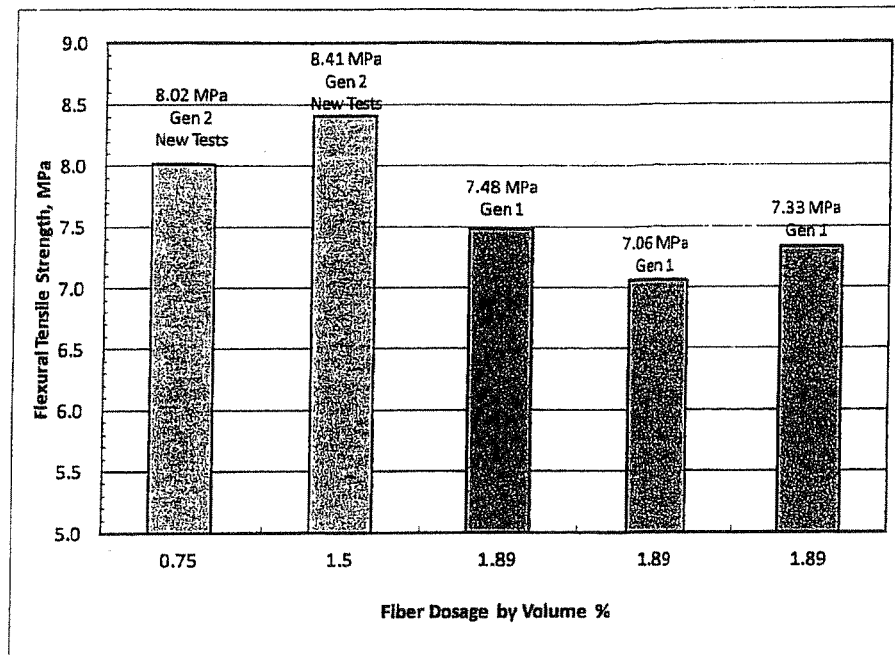


FIG 6 Flexural Tensile Strength of Dry Mix Concrete

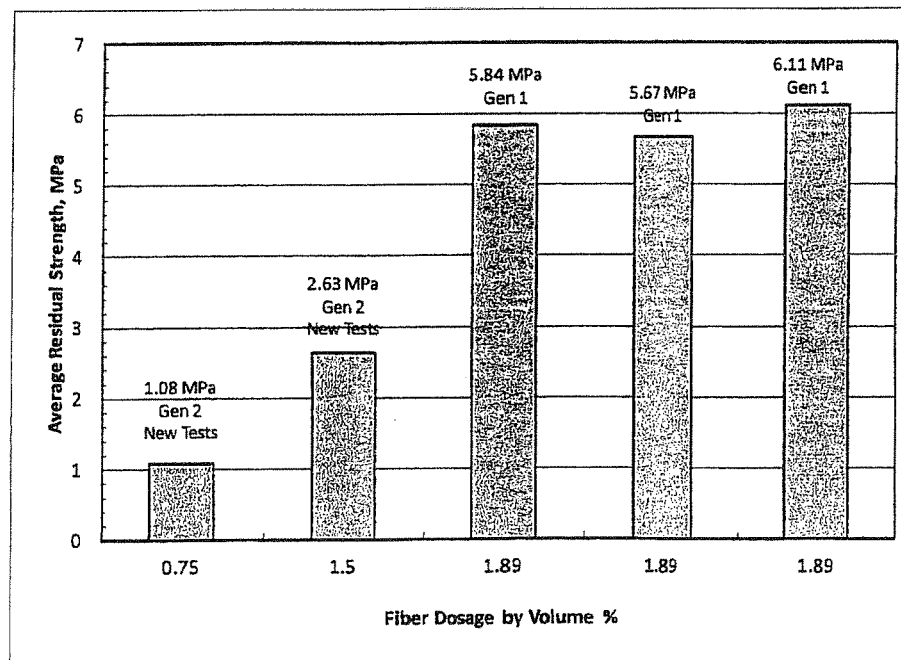


FIG 7 Average Residual Strength of Dry Mix Concrete

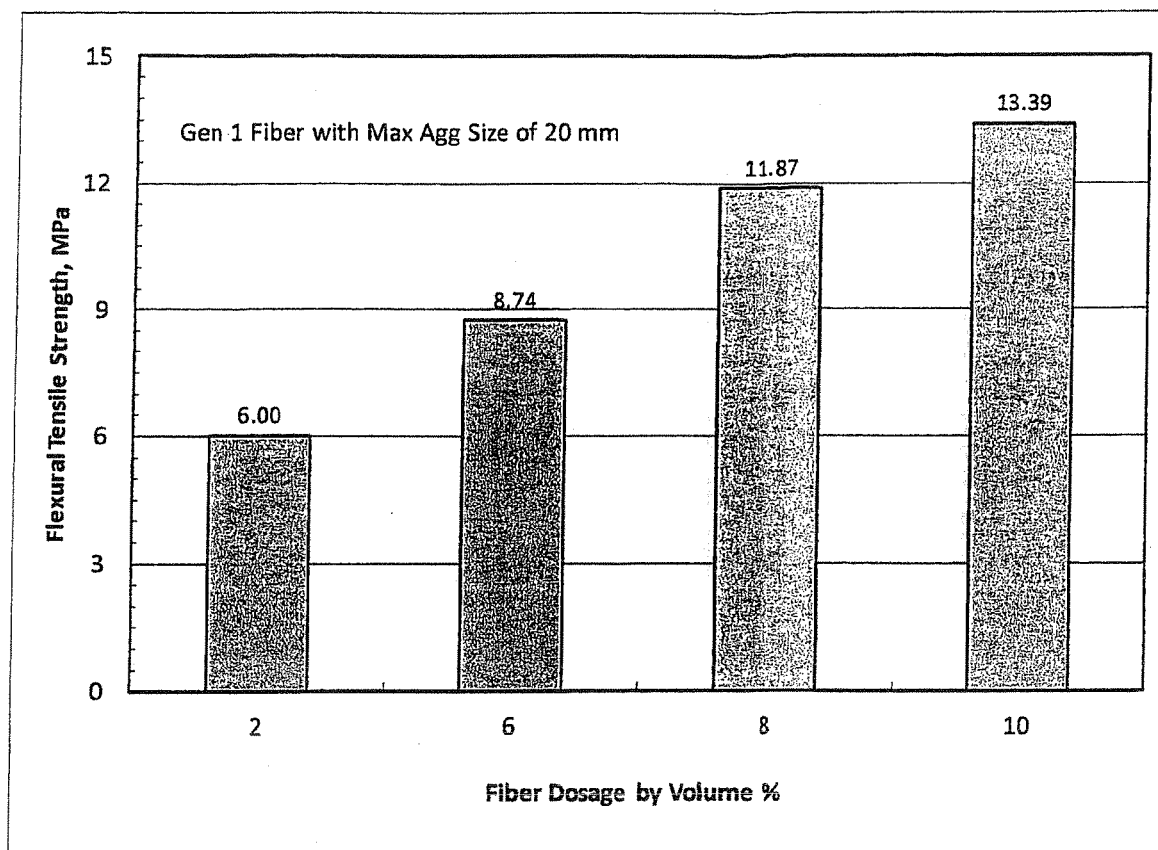


FIG 8 Flexural Tensile Strength of Normal Concrete with 20 mm Maximum Aggregate Size

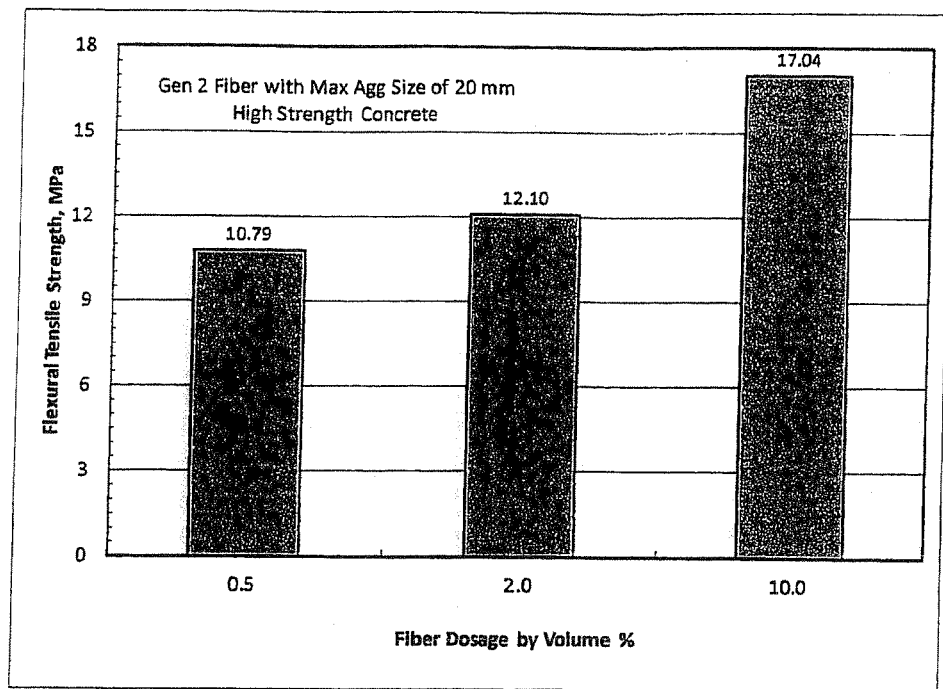


FIG 9 Flexural Tensile Strength of High Strength Concrete with 20 mm Maximum Size Aggregate (New Tests)

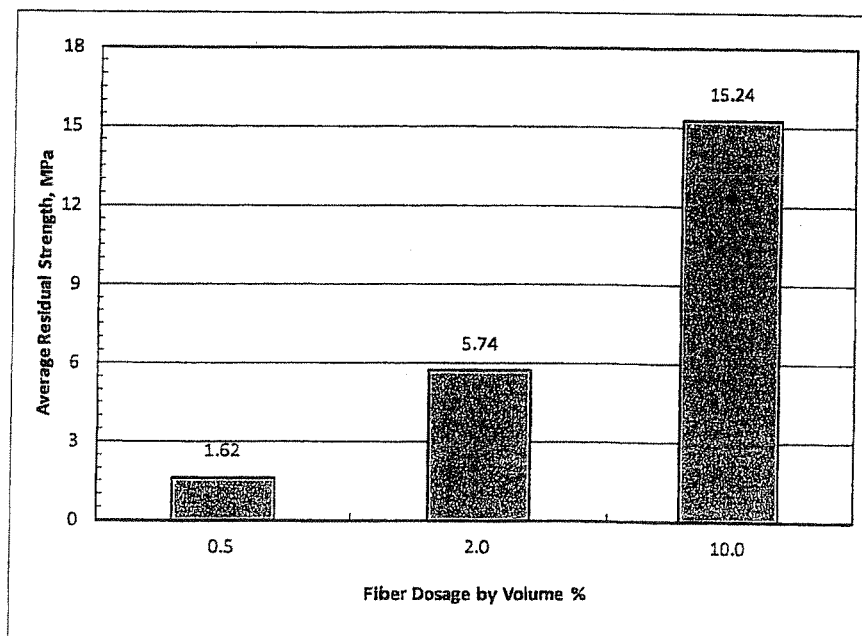


FIG 10 Average Residual Strength of High Strength Concrete with 20 mm Maximum Size Aggregate (New Tests)

SI Units	Dry Mix Gen 2 (0.75%)	Dry Mix Gen 2 (1.5%)	Dry Mix (Series 4)	Dry Mix (Series 1)	Dry Mix (Series 2)
Fiber Dosage % by Volume (V_f)	0.75	1.5	1.89	1.89	1.89
Fiber Dosage (kg/m^3)	13.5	27	34	34	34
Concrete Compressive Strength, MPa	47.1	51.9	96.8	64.2	88.1
Flexural Tensile Strength (MPa)	8.02	8.41	7.48	7.06	7.33
Average Residual Strength (MPa)	1.03	2.63	5.84	5.67	6.11
Predicted Modulus of Rupture (ACI Equation), MPa	27	24.9	6.13	5.05	5.85
Predicted f_r from Suggested Equation, MPa	4.66	5.31	7.54	6.21	7.19
Predicted ARS from Suggested Equation, MPa	0.79	1.58	1.98	1.98	1.98

Table 1 Dry Mix Concrete Test Results (Gen 2 in color cells – New Tests)

SI Units	Normal Series 1	Normal Series 2	Normal Series 3	Normal Series 9	Normal* Trial Mix # 5	Normal Trial Mix # 6
Fiber Dosage % by Volume (V_f)	2	6	8	10	8	10
Fiber Dosage (kg/m^3)	36	108	144	179	144	179
Concrete Compressive Strength, MPa	68.4	64.9	69.9	47.0	77.2	75.45
Flexural Tensile Strength (MPa)	6.00	8.74	10.51	10.67	11.87	13.39
Average Residual Strength (MPa)	3.26	6.68	9.33	10.40	-	-
Predicted Modulus of Rupture (ACI Equation), MPa	5.15	5.02	5.21	4.27	5.47	5.41
Predicted f_r from Suggested Equation, MPa	6.41	8.69	10.29	9.48	10.81	12.01
Predicted ARS from Suggested Equation, MPa	2.10	6.30	8.40	10.50	8.40	10.50

* Average of two beams only
All others - average of at least three

Table 2 Normal Concrete with Max 20 mm Aggregate Test Results (New Tests in color cells)

High Strength Concrete - SI Units	HS Gen 2 (0.5%)	HS Gen 2 (2.0%)	HS Gen 2 (10.0%)
Fiber Dosage % by Volume (V_f)	0.5	2.0	10.0
Fiber Dosage (kg/m^3)	9	36	179
Concrete Compressive Strength, MPa	90.0	90.9	84.0
Flexural Tensile Strength (MPa)	10.79	12.10	17.04
Average Residual Strength (MPa)	1.62	5.74	15.24
Predicted Modulus of Rupture (ACI Equation), MPa	5.88	5.91	5.68
Predicted f_r from Suggested Equation, MPa	6.24	7.36	12.65
Predicted ARS from Suggested Equation, MPa	0.53	2.10	10.50

Table 3 High Strength Concrete with Max 20 mm Aggregate (New Tests in color cells)