PATENT COOPERATION TREATY

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See paragraph 1 below

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Applicant
SOLIDIA TECHNOLOGIES, INC.

1. □ REPLY DUE within _____ months/days from the above date of mailing
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2. COMMUNICATION:
The US receiving office acknowledges receipt of replacement drawings received on 24 SEP 2015. However, the applicant is hereby informed that the substitute drawings will not be entered because the original drawings filed 03 AUG 2015 has same quality.

Name and mailing address of the receiving Office
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Form PCT/RO/132 (July 1992; reprint January 2004)
FIG. 1

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FIG. 11. Mass gain of NYAD 400 mineral wollastonite following a 60°C reaction with CO₂.
FIG. 12. Mass gain of rotary kiln calcium silicate compositions following a 60°C reaction with CO₂. The mass gain at 0 hours indicates the mass gain after wetting the powder, due to the hydration of free lime.
FIG. 13a. X-Ray diffraction data and crystallographic peaks used for Reitveld refinement, as is rotary kiln sample 12.
FIG. 13b. X-Ray diffraction data and crystallographic peaks used for Reitveld refinement, as is rotary kiln calcium silicate composition sample 12 after a 20 hour carbonation at 60°C.
FIG. 14. X-Ray diffraction pattern and associated crystallographic peaks of calcium silicate compositions produced from high purity chemicals in a box furnace.
FIG. 15a. X-Ray diffraction pattern of siliceous limestone calcined at 1,000°C.
FIG. 15b. X-Ray diffraction pattern of silicaceous limestone calcined at 1,100°C.
FIG. 15c. X-Ray diffraction pattern of siliceous limestone calcined at 1,200°C.
FIG. 16. Synthetic high temperature calcium silicate composition. The X-Ray diffraction pattern indicates that the material is primarily amorphous in structure.
FIG. 17. X-Ray diffraction spectrum of a synthetic amorphous calcium silicate composition (bottom) and the same sample after CO$_2$ curing at 60°C (top).
FIG. 18. Particle size distribution of jet milled exemplary calcium silicate composition (SC-C2).
FIG. 19. Particle size distribution of jet milled + ball milled exemplary calcium silicate composition (SC-C2a).
FIG. 20. Flow of SC-C2 and CS-C2a mortars with water-to-binder ratio of 0.375 with (a) SC-C2 (b) SC-C2a.
FIG. 21. Compressive strength of 4"x8" cylinder under different condition for concrete mixes made with SC-C2 (top) and SC-C2a (bottom). (Dry and 24 hour soak is an average of 5 samples each and vacuum saturation test was conducted with 3 cylinders).
FIG. 22. Milled clinker calcium silicate composition produced in a close circuit ball mill with a relatively narrow distribution.
FIG. 23. Calcium silicate composition clinker milled to achieve a broad particle size with a reduced mean particle size vs. the commercially milled powder.
FIG. 24. Calcium silicate composition clinker milled to achieve a broad particle size with increased mean particle size vs. commercially milled powder.
FIG. 25. Industrially milled calcium silicate composition(blue) compared with similar broad distributions milled to coarser and finer mean particle sizes.