[00259] The treated fibers using the process and method discussed herein above showed an average tensile strength value of 37.4 grams/tex. The same cotton fibers when untreated showed a value of 30.7 grams/tex. Generally, a value above 31 is very strong. The strength test showed that the applicant's copper oxide treated cotton had a value significantly above values deemed to be strong 29-30 or very strong 31 or above. This increase in tensile strength is unexpected as treating fibers generally is expected to weaken them. This is readily observable when washing fabrics. The more times a textile is washed, the weaker its fibers become.

[00260] A wash test of fabric made from fibers described above was carried out. The fabric was bleached, dyed and washed for 100 home washings or 50 industrial washings. After washing, its bactericidal efficacy was tested and found not to have deteriorated. The tests were done by an independent testing lab Manufacturing Solutions Centre of Conover, NC, USA using 2003 AATCC Standard of Reference Liquid Detergent WOB. The bactericidal efficacy test used was AATCC–Test 100-2012- Assessment of Antibacterial Finishes on Textile Materials.

[00261] The treated fibers have the following features:

[00262] Greater amounts of embedded preselected particulates than when prepared by prior art systems and methods. See comparative XRF data in Example 4 of Section A.

[00263] Particles and materials are embedded within the interior of the fiber, even reaching the fiber's lumen, and not just remaining near or on the exterior of the fiber's cuticle.

[00264] Micronaire value is increased.

[00265] Tensile strength is increased to at least 36 g/tex.

[00266] Visually the treated fibers do not appear to be seen to be different from untreated fibers.

[00267] Treated fibers cannot be felt to be different from untreated fibers.

[00268] Without intending to limit the invention, the method and system of the present invention may be used to impart the following features to sliver fibers, particularly cellulose sliver fibers, when appropriate particulates are embedded or otherwise attached to the fibers:

[00269] To impart non-ignition or retarded ignition properties to sliver fibers, wherein at least one preselected compound or composition is a water- insoluble particulate compounds and compositions which may contain waters of hydration or oxygen scavengers or intumescent compounds. These compounds or compositions include, but are not limited to, at