

ISSUED PATENTS

1. **U.S. 8,227,019** *"High-throughput ex-situ method for rare-earth-barium-copper-oxide (REBCO) film growth"*
2. **U.S. 8,182,862** *"Ion beam-assisted high-temperature superconductor (HTS) deposition for thick film tape"*
3. **U.S. 8,153,281** *"Metalorganic chemical vapor deposition (MOCVD) process and apparatus to produce multi-layer high-temperature superconducting (HTS) coated tape"*
4. **U.S. 8,119,187** *"Chemical vapor deposition process using novel precursors"*
5. **U.S. 7,914,848** *"Tape-manufacturing system having extended operational capabilities"*
6. **U.S. 7,910,155** *"Method for manufacturing high temperature superconducting conductor"*
7. **U.S. 7,879,763** *"Superconducting article and method of making"*
8. **U.S. 7,854,057** *"Method of facilitating superconducting tape manufacturing"*
9. **U.S. 7,781,377** *"Anti epitaxial in a superconducting article and related articles, devices and systems "*
10. **U.S. 7,758,699** *"Apparatus for and method of continuous HTS tape buffer layer deposition using large scale ion beam assisted deposition"*
11. **U.S. 7,718,574** *"Biaxially-textured film deposition for superconductor coated tapes"*
12. **U.S. 7,627,356** *"Multifilament AC tolerant conductor with striated stabilizer and devices incorporating the same"*
13. **U.S. 7,554,317** *"Critical current testing techniques for superconducting conductors"*
14. **U.S. 7,531,205** *"High throughput ion beam assisted deposition"*
15. **U.S. 7,521,082** *"Coated HTS tapes, articles, and processes for forming same"*
16. **U.S. 7,501,145** *"High throughput continuous pulsed laser deposition process"*
17. **U.S. 7,445,808** *"Method of forming a superconducting article"*
18. **U.S. 7,417,192**, *"Superconductor components"*
19. **U.S. 7,387,811**, *"Method for manufacturing superconducting conductors by Chemical Vapor Deposition"*
20. **U.S. 7,365,271**, *"Novel superconducting articles, and methods of forming and using same"*

21. **U.S. 7,338,683**, *"Superconductor Fabrication Processes"*
22. **U.S. 7,286,032**, *"Rare-earth-Ba-Cu-O superconductors and methods of making same"*
23. **U.S. 7,247,340**, *"Method of making a superconductor conductor"*
24. **U.S. 7,226,893**, *"Superconductive articles having density characteristics"*
25. **U.S. 7,074,744**, *"Apparatus for consecutive deposition of HTS buffer layers"*
26. **U.S. 7,071,149**, *"Method for producing biaxially textured buffer layers and related articles, devices and systems"*
27. **U.S. 7,071,148**, *"Joined superconductive articles"*
28. **U.S. 7,025,826**, *"Methods for surface texturing amorphous films"*
29. **U.S. 6,998,028**, *"Methods for forming superconducting conductors"*
30. **U.S. 6,908,362**, *"Reel-to-reel substrate Tape polishing process"*
31. **U.S. 6,906,008**, *"Apparatus for consecutive deposition of HTS buffer layers"*
32. **U.S. 6,849,580**, *"Method of producing biaxially textured buffer layers and related articles, devices and systems"*
33. **U.S. 5,846,912**, *'Method for preparation of textured YBa₂Cu₃O_x superconductor'*
34. **U. S. 5,462,917**, *'Process of preparing superconductive oxide complexes containing L, Ba, Cu, and O and method of using the same'*,
35. **U. S. 5,439,879**, *'Method for joining superconductor segments to form a superconducting article'*
36. **U.S. 5,306,697**, *'Oriented grained Y-Ba-Cu-O superconductors'*
37. **U.S. 4,956,336**, *'Oriented-grained Y-Ba-Cu-O superconductors having high critical currents and method for producing same'*
38. **Korean 54,4561**, *"Coated HTS tapes, articles, and processes for forming same"*
39. **Chinese ZL 200480015467.8**, *"Ion beam-assisted HTS deposition for thick film tape"*
40. **Indian 229405**, *"A process for continuous high throughput preparation of high temperature superconducting tape"*
41. **Indian 229590**, *"Metal Organic Chemical Vapor Deposition process and apparatus to produce multilayer high temperature superconducting coated tape"*

42. **Indian 230598**, *"A process for continuously producing high current density superconductor"*
43. **Chinese 100536187C**, *"Biaxially-textured film deposition for superconductor coated tapes"*
44. **Chinese ZL 200480022814.X**, *"Method of producing biaxially textured buffer layers and related articles, devices and systems"*
45. **Chinese CN ZL200480038151.0**, *"Novel superconducting articles, and methods of forming and using same"*
46. **Chinese ZL 2004800175157**, *"MOCVD process and apparatus to produce multi-layer HTS coated tape"*
47. **Chinese ZL 200680005507.X**, *"Superconductive articles having density characteristics"*
48. **European EP 1 769 542 B1**, *"Novel superconducting articles, and methods of forming and using same"*
49. **Indian 247522**, *"Method for producing biaxially textured buffer layers and related articles, devices and systems"*
50. **Korean 10-1088642**, *"Ultraviolet (UV) and plasma assisted metalorganic chemical vapor deposition (MOCVD) system"*
51. **Indian 252944**, *"High throughput ex-situ process for producing Rare-earth Barium Copper Oxide (REBCO) film"*