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(54) **BIOSYNTHESIS OF METAL NANOPARTICLES**

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(71) Applicant: **KING SAUD UNIVERSITY**, Riyadh (SA)

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(72) Inventors: **Nayf Sultan Helial Alaloi Alharbi**, Riyadh (SA); **Jamal Mohammed Ali Khaled**, Riyadh (SA); **Mohamed Salah El-Din Hodhod**, Riyadh (SA); **Shine Moosa Kadaikunnan**, Riyadh (SA); **Ahmed Saad Alobaidi**, Riyadh (SA)

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(73) Assignee: **King Saud University**, Riyadh (SA)

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **16/423,532**

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*Primary Examiner* — Ruth A Davis  
(74) *Attorney, Agent, or Firm* — Richard C. Litman; Nath, Goldberg & Meyer

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(57) **ABSTRACT**

A method of preparing metal nanoparticles using a fungal extract includes providing an aqueous solution including a metal salt; and combining the fungal extract with the aqueous metal salt solution to produce the metal nanoparticles. The fungal extract can be an aqueous extract of the manglicolous fungi The metal salt can be copper sulfate (CuSO<sub>4</sub>) and the metal nanoparticles can be copper nanoparticles. The metal nanoparticles can have a mean diameter in the range of from about 5 nm to about 100 nm. The copper nanoparticles can be used as an antimicrobial agent.

(58) **Field of Classification Search**  
CPC ..... A01N 59/20; A01N 25/12; C12P 3/00  
See application file for complete search history.

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**2 Claims, 5 Drawing Sheets**