

GENETICALLY-ENGINEERED *CHROMOBACTERIUM VIOLACEUM* WITH
ENHANCED CYANIDE LIXIVIANANT PRODUCTION FOR BIOLEACHING OF
PRECIOUS METAL FROM ELECTRONIC WASTE

ABSTRACT OF THE DISCLOSURE

The invention provides, *inter alia*, synthetic microorganisms for enhanced bioleaching that include a heterologous *hcnABC* operon, which results in enhanced cyanide production by the microorganism, and methods of using these microorganisms for, *e.g.*, bioleaching of metals, such as precious metals, *e.g.*, gold, from sources such as electronic scrap material.

(Figure 1)