

SORBENTS DERIVED FROM INCINERATION AND GASIFICATION ASHES FOR HIGH TEMPERATURE CARBON CAPTURE BY CALCIUM LOOPING

ABSTRACT

There is provided a method of producing CO₂ sorbents from Ca-containing incineration and gasification ashes. Also described is an ash-derived CO₂ sorbent comprising ash prepared according to such a method. An ash-derived CO₂ sorbent comprising washed incineration bottom ash, agglomerated calcined gasification fly ash, or a combination thereof is also provided. There is also provided a calcium looping apparatus for carbon dioxide capture, the apparatus comprising such ash-derived sorbents, as well as the use of such sorbents in a calcium looping method or apparatus.

FIG. 1