

Abstract

Battery Recyclability Assessment Method And System

5 A battery recyclability assessment method comprises identifying a volume
variation of a battery-under-test; identifying an external surface degradation of the battery-
under-test upon the volume variation being determined not exceeding a predetermined
volume variation threshold, and obtaining electrical characteristics of the battery-under-
test to determine a recyclability of the battery-under-test upon the external surface
10 degradation being determined not exceeding a predetermined surface degradation
threshold. Determining a volume variation of a battery-under-test comprises hermetically
sealing the battery-under-test in a chamber; filling the chamber with a volume of test air
until an air pressure in the chamber reaching a predetermined level and comparing the
volume of test air with a volume of reference air corresponding to a reference battery. The
15 reference battery has a specification the same as the battery-under-test. The volume
variation of the battery-under-test is determined by a difference between the volume of
reference air and the volume of test air.

20 (Fig. 1)