

- [54] **COATING A SUBSTRATE WITH SOFT PARTICLES**
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- [22] Filed: **May 3, 1972**
- [21] Appl. No.: **249,772**
- [52] U.S. Cl..... **252/463, 252/477 R, 117/22, 117/31, 117/130 R**
- [51] Int. Cl..... **B01j 11/06, B01j 11/08, B05b 7/14**
- [58] Field of Search..... **252/477 R, 463; 117/22, 117/31, 130 R**

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[57] **ABSTRACT**

A method of producing a substrate having a particulate coating of high surface area to mass ratio, said method comprising in sequence the steps of:

- I. disposing between a substrate and an intermediate body a mixture comprising:
 - A. hard particles which are harder than the substrate and are harder than the intermediate body, and
 - B. soft particles which are softer than the hard particles and are softer than the substrate,
- II. compressing the substrate and intermediate body, with particles therebetween whereby the intermediate body pushes the hard particles into the substrate, and
- III. removing the intermediate body from the particles leaving the hard particles embedded in the substrate and the soft particles adhering to the substrate.

The coated substrates produced by the process of the present invention find utility as catalytic devices to accelerate or retard chemical reactions.

16 Claims, 2 Drawing Figures