



US 20230230833A1

(19) **United States**(12) **Patent Application Publication**
Pierreux et al.(10) **Pub. No.: US 2023/0230833 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **METHOD FOR FORMING A LAYER
PROVIDED WITH SILICON****Publication Classification**(51) **Int. Cl.****H01L 21/02** (2006.01)**H10B 43/27** (2006.01)(52) **U.S. Cl.****CPC H01L 21/0262** (2013.01); **H01L 21/02532**
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Nijkerk (NL)(21) Appl. No.: **18/127,201**(22) Filed: **Mar. 28, 2023****Related U.S. Application Data**(62) Division of application No. 17/352,555, filed on Jun.
21, 2021, now Pat. No. 11,646,204.(60) Provisional application No. 63/043,398, filed on Jun.
24, 2020.

(57)

ABSTRACT

A method for forming layers with silicon is disclosed. The layers may be created by positioning a substrate within a processing chamber, heating the substrate to a first temperature between 300 and 500° C. and introducing a first precursor into the processing chamber to deposit a first layer. The substrate may be heated to a second temperature between 400 and 600° C.; and, a second precursor may be introduced into the processing chamber to deposit a second layer. The first and second precursor may comprise silicon atoms and the first precursor may have more silicon atoms per molecule than the second precursor.

