



US 20240237322A9

(19) **United States**
(12) **Patent Application Publication**
Haas et al.

(10) **Pub. No.: US 2024/0237322 A9**
(48) **Pub. Date: Jul. 11, 2024**
CORRECTED PUBLICATION

(54) **SYSTEM FOR DETERMINING
CONTAMINATION COEFFICIENTS AND/OR
DEGREES OF CONTAMINATION IN
PARTICULAR DURING THE REFLOW
SOLDERING OF PRINTED CIRCUIT
BOARDS, AND ASSOCIATED EVALUATION
UNIT**

(30) **Foreign Application Priority Data**

Jun. 1, 2022 (DE) 10 2022 113 851.8

Publication Classification

(51) **Int. Cl.**
H05K 13/08 (2006.01)
H05K 5/00 (2006.01)
H05K 13/04 (2006.01)
(52) **U.S. Cl.**
CPC *H05K 13/0817* (2018.08); *H05K 5/0018*
(2022.08); *H05K 13/0465* (2013.01); *H05K*
13/085 (2018.08); *H05K 13/0895* (2018.08)

(71) Applicant: **ERSA GmbH**, Wertheim (DE)
(72) Inventors: **Michael Haas**, Schollbrunn (DE);
Benedict Fleischmann, Neubrunn
(DE); **Harald Grumm**, Ottobrunn
(DE); **Lukas Thanhäuser**, Würzburg
(DE)
(73) Assignee: **ERSA GmbH**, Wertheim (DE)

(21) Appl. No.: **18/201,552**

(22) Filed: **May 24, 2023**

Prior Publication Data

(15) Correction of US 2024/0138134 A1 Apr. 25, 2024
See (22) Filed.
See (30) Foreign Application Priority Data.
(65) US 2024/0138134 A1 Apr. 25, 2024

(57) **ABSTRACT**

A system for determining a degree of contamination of production units of a production line for the printing, equipping and reflow soldering of printed circuit boards, and evaluation unit.

