



US 20230231958A1

(19) **United States**(12) **Patent Application Publication**
SHENG(10) **Pub. No.: US 2023/0231958 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **MULTI-FUNCTION PRINTER WITH
DETACHABLE SCANNER BODY CAPABLE
OF DIRECTLY STARTING SCANNING AND
PRINTING UPON DETECTION OF SHEET
MEDIUM****Publication Classification**(51) **Int. Cl.**
H04N 1/00 (2006.01)
(52) **U.S. Cl.**
CPC **H04N 1/00541** (2013.01); **H04N 1/00822**
(2013.01); **H04N 1/00241** (2013.01); **H04N**
1/00689 (2013.01)(71) Applicant: **AVISION INC.**, Hsinchu (TW)(72) Inventor: **Shao-Lan SHENG**, Hsinchu City (TW)(21) Appl. No.: **18/188,953**(22) Filed: **Mar. 23, 2023****Related U.S. Application Data**(63) Continuation-in-part of application No. 17/398,664,
filed on Aug. 10, 2021.(30) **Foreign Application Priority Data**

Sep. 7, 2020 (TW) 109130560

(57) **ABSTRACT**

A multi-function printer includes a printer body and a scanner body. A printer module is disposed in the printer body. At least one first scanning module, at least one feeding roller and a sensor are disposed in the scanner body. The feeding roller and the sensor are disposed at an inlet of a sheet passage. When the sensor senses presence of a sheet medium, the first scanning module immediately performs image scanning on the sheet medium to obtain image data, and then the printer module prints out the image data.

