



US 20240214504A1

(19) **United States**(12) **Patent Application Publication****Nithianand et al.**(10) **Pub. No.: US 2024/0214504 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **UNIVERSAL SECURE WORKFLOW SYSTEM
AND METHOD**(71) Applicant: **THINXTREAM TECHNOLOGIES
PTD. LTD., Singapore (SG)**(72) Inventors: **Ranganathan Nithianand, Bangalore
(IN); Ranga Raj, Bangalore (IN); Teck
Lee Low, Singapore (SG)**(73) Assignee: **THINXTREAM TECHNOLOGIES
PTD. LTD., Singapore (SG)**(21) Appl. No.: **18/528,779**(22) Filed: **Dec. 4, 2023****Related U.S. Application Data**(63) Continuation of application No. 17/947,190, filed on
Sep. 19, 2022, now Pat. No. 11,838,483, which is a
continuation of application No. 14/801,446, filed on
Jul. 16, 2015, now Pat. No. 11,457,123.**Publication Classification**(51) **Int. Cl.**
H04N 1/44 (2006.01)
G06F 3/12 (2006.01)
G06F 21/60 (2006.01)
G06K 15/00 (2006.01)
H04N 1/00 (2006.01)(52) **U.S. Cl.**CPC **H04N 1/4426** (2013.01); **G06F 3/1204**
(2013.01); **G06F 3/1222** (2013.01); **G06F**
3/1236 (2013.01); **G06F 3/1238** (2013.01);
G06F 3/1244 (2013.01); **G06F 3/1267**
(2013.01); **G06F 3/1276** (2013.01); **G06F**
3/1285 (2013.01); **G06F 3/1288** (2013.01);
G06F 3/1292 (2013.01); **G06F 3/1298**
(2013.01); **G06F 21/608** (2013.01); **G06K**
15/4095 (2013.01); **H04N 1/0023** (2013.01);
H04N 1/00501 (2013.01); **H04N 1/00854**
(2013.01); **H04N 1/4406** (2013.01); **G06F**
3/1247 (2013.01); **H04N 2201/006** (2013.01);
H04N 2201/0094 (2013.01)

(57)

ABSTRACT

Embodiments disclosed include systems and methods for computer automated print services control comprising authenticating a user credential input via a user device. The system and method includes generating, by a printer driver comprised in the user device, a user interface comprising features supported by a plurality of printing devices. Further, it includes receiving via the user device over the network, a print instruction comprising the features supported by the plurality of printing devices connected to the computer system over the network. And based on the print instruction, generating a print job in an embodiment. Further, based on the user authentication at one of the plurality of printing devices, converting via a gateway, the received print instruction into a format compatible with that printing device and releasing the generated print job for printing at that printing device, according to an embodiment.

Current scenario