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# United States Patent [19]

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- [54] **INFRA-RED FORCED AIR DRYER AND EXTRACTOR**
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[57] **ABSTRACT**

An infra-red dryer utilizes high velocity air jets which scrub and break up the moist air layer which clings to the surface of a freshly printed and/or coated sheet. The high velocity air jets are directed through multiple air flow apertures across an array of infra-red lamps onto the freshly printed and/or coated sheets. An extractor exhausts the moisture-laden air from an exposure zone while short wave infra-red radiation heats the ink and/or protective coating. The effective exposure to pressurized air is increased by the air jets which produce a balanced pressure air blanket along the sheet travel path. The moist air layer is displaced from the printed and/or coated sheet and is extracted from the press as the sheet moves through the exposure zone.

**15 Claims, 5 Drawing Sheets**

