

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT R. GARAND, JOHN L. BANDA
and CHARLES PIKE

Appeal No. 95-2944
Application No. 07/986,771¹

ON BRIEF

Before GARRIS, PAK and WEIMAR, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 13 through 26 which are all of the claims remaining in the application.

¹ Application for patent filed December 8, 1992. According to appellants, this application is a division of Application 07/777,078, filed October 16, 1991, now U.S. Patent No. 5,228,918, issued July 20, 1993, which is a continuation-in-part of Application 07/605,235, filed October 29, 1990, now abandoned.

Appeal No. 95-2944
Application No. 07/986,771

The subject matter on appeal relates to a system for marking a continuous substrate which includes an elongate heater disposed within an elongate housing and an outlet tube disposed proximate to the elongate heater and substantially parallel to the elongate heater within the elongate housing, wherein a significant portion of gas directed through a gas inlet into the outlet tube is heated by the elongate heater while being conducted through the outlet tube and is then discharged from the outlet tube toward the continuous substrate in the housing. This appealed subject matter is adequately illustrated by independent claim 13², a copy of which taken from the appellants' Specification is appended to this decision.

The following references are relied upon by the examiner as evidence of obviousness:

Stelling, Jr. (Stelling)	3,074,179	Jan. 22, 1963
Rünkel et al. (Rünkel)	4,565,524	Jan. 21, 1986
Fleissner	4,674,197	Jun. 23, 1987
Baxter et al. (Baxter)	4,708,887	Nov. 24, 1987

Claims 13 through 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Baxter in view of Fleissner and Stelling,

² On lines 4 and 5 from the bottom of claim 13, the phrase "the aqueous-based ink" lacks strict antecedent basis and should read, for example, --an aqueous-based ink--.

Appeal No. 95-2944
Application No. 07/986,771

and claims 21 through 26 stand correspondingly rejected over these references and further in view of Rünkel.

Neither of these rejections can be sustained.

We agree with the appellants that the references applied by the examiner contain no teaching or suggestion of an outlet tube disposed proximate and substantially parallel to an elongate heater as required by the claims on appeal. The examiner's view that Fleissner and Stelling would have suggested this claim feature is based upon clearly erroneous findings of fact. Specifically, the examiner has made clearly erroneous findings with respect to the disclosures of both Fleissner and Stelling, each of which alone is fatal to the rejection before us.

Concerning Fleissner, while screen cover 10 may function as an elongate heater, the examiner is clearly incorrect in believing that patentee's Figure 9 shows "unheated air is accelerated through chamber 9 in a plane parallel to thread path 6 [and thus parallel to cover 10 which serves as an elongate heater]" (Answer, page 6; emphasis in original). In fact, the flow arrows near the bottom of Figure 9 unambiguously show that the air flow is transverse, not parallel, to thread path 6 and correspondingly "elongate heater" or cover 10. The examiner's confusion in this regard may have arisen by a failure to

Appeal No. 95-2944
Application No. 07/986,771

appreciate that Figure 9 shows a transverse view of patentee's radiation tunnel (e.g., see lines 12-13 in column 9) whereby the thread path 6 and the elongate axis of cover 10 are displayed in Figure 9 as perpendicular to the plane of the paper.

The examiner's obviousness conclusion is also fatally premised upon his erroneous belief that, "[a]s illustrated in Figure 1 [of Stelling], the blast tube **BT** is orientated parallel to the web travel direction" (Answer, page 7). Actually, patentee's blast tubes are orientated perpendicular, not parallel, to the web travel direction as clearly shown by a comparison of Figures 1 and 2 and expressly disclosed in claim 1 of the patent which recites "a blast tube assembly having an air inlet end and extending into said tunnel in a direction which is generally transverse to said web" (emphasis added).

Particularly under the circumstances discussed above, it is clear to us that the appellants' claim feature under consideration would not have been suggested by the applied prior art generally including the Fleissner and Stelling references specifically. It follows that we cannot sustain the examiner's § 103 rejection of claims 13 through 20 as being unpatentable over Baxter in view of Fleissner and Stelling or his

Appeal No. 95-2944
Application No. 07/986,771

corresponding rejection of claims 21 through 26 as being unpatentable over these references and further in view of Rünkel.

The decision of the examiner is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge))	
)	
)	
CHUNG K. PAK)	BOARD OF PATENT
Administrative Patent Judge))	APPEALS AND
)	INTERFERENCES
)	
ELIZABETH C. WEIMAR)	
Administrative Patent Judge))	

Appeal No. 95-2944
Application No. 07/986,771

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APPENDIX

13. A system for marking a continuous substrate, comprising:

a) an elongate housing, having an inlet end and an outlet end, for housing the continuous substrate as the continuous substrate is directed through the housing from the inlet end to the outlet end;

b) an elongate heater disposed within the elongate housing and extending from the inlet end to the outlet end of the elongate housing;

c) an outlet tube disposed proximate to the elongate heater and substantially parallel to the elongate heater within the elongate housing, the outlet tube having a gas inlet at a first end and defining a plurality of gas outlets disposed along a substantial portion of the length of the outlet tube, whereby a significant portion of gas directed through the gas inlet into the outlet tube is heated by the elongate heater, while being conducted through the outlet tube, and is then discharged from the outlet tube through the gas outlets toward the continuous substrate in the housing, thereby passing across the continuous substrate and heating the aqueous-based ink in an amount sufficient to cause a pigment of the aqueous-based ink to bond to the continuous substrate and thereby mark the continuous substrate.