

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte MASAHIRO SUMIDA  
and YUICHI YAMAZAKI

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Appeal No. 2002-1164  
Application 09/159,767

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ON BRIEF

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Before FRANKFORT, STAAB, and MCQUADE, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Masahiro Sumida et al. appeal from the final rejection (Paper No. 19) of claims 9 through 18, all of the claims pending in the application.

THE INVENTION

The invention relates to "a paper web folding and cutting apparatus particularly for a form printing press" (specification, page 1). Representative claim 9 reads as follows:

9. A paper web folding and cutting apparatus comprising:  
a paper web traveling path along which a continuous paper web can travel at a predetermined traveling speed and in a paper web traveling direction;

a cutting assembly disposed along the paper web traveling path and adapted to form a line of cuts, having at least one uncut portion, at the top and bottom of each portion of the continuous paper web to be folded; and

an oscillatory shooter assembly disposed along the paper web traveling path, said oscillatory shooter assembly being located downstream of said cutting assembly with respect to the paper web traveling direction,

said oscillatory shooter assembly including a counter roller and a nozzle roller disposed at a lower end portion of said oscillatory shooter assembly, said counter and nozzle rollers being rotatable at a peripheral speed that is faster than the paper web traveling speed, said nozzle roller being movable into contact with said counter roller and away from said counter roller so as to be separated therefrom,

said oscillatory shooter assembly being capable of moving in an oscillatory motion with the continuous paper web interposed between said nozzle roller and said counter roller so as to fold the continuous paper web in a zigzag fashion along each of the lines of cuts formed by said cutting assembly so that each fold coincides with one of the lines of cuts,

wherein the continuous paper web is cut along one of the lines of cuts by moving the nozzle roller into contact with the counter roller when the one cut line approaches the vicinity of an upstream side of said nozzle roller and said counter roller.

#### THE PRIOR ART

The reference relied on by the examiner to support the final rejection is:

Kishine et al.  
Japanese Patent  
Document (Kishine)<sup>1</sup>

9-76460

Mar. 25, 1997

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<sup>1</sup> The record contains an English language translation of this reference provided by the examiner (Paper No. 25) as well as a copy of equivalent U.S. Patent No. 5,800,327.

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#### THE REJECTION

Claims 9 through 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kishine.

Attention is directed to the brief (Paper No. 22) and answer (Paper No. 23) for the respective positions of the appellants and examiner regarding the merits of this rejection.

#### DISCUSSION

Kishine discloses an apparatus 2 for folding and cutting a continuous paper web 1 which has been printed and cross perforated at predetermined intervals by an upstream printing machine and perforator device. The apparatus has much in common with the apparatus set forth in the appealed claims including a paper web traveling path 17, a cutting assembly 20 adapted to form in the web a line of cuts 46 having at least one uncut portion 47, and an oscillatory shooter assembly 3 having a counter roller 4 and a nozzle roller 5. In use, the web is drawn into the apparatus by pull rollers 41 and 16 and folded in a zigzag manner along the cross perforations by the oscillatory shooter assembly. When marks applied to the web at predetermined points along its length are detected by a sensor 45, the cutting

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assembly is actuated to form a line of cuts in the web, preferably coincident with a set of cross perforations, and the counter and nozzle rollers are engaged with the web to separate it along the line of cuts to produce an individual form having a desired length and number of folds.

Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

As indicated above, independent claim 9 requires a cutting assembly adapted to form a line of cuts at the top and bottom of each portion of the web to be folded, and an oscillatory shooter assembly capable of folding the web in zigzag fashion along the cut lines so that each fold coincides with one of the cut lines. Independent claims 16 and 17 contain similar recitations, and also require that the cutting assembly operate continuously as the web travels along the web traveling path. The examiner's determination that Kishine meets these limitations is unsound.

To begin with, Kishine's cutting assembly forms cut lines only at predetermined points where the web is to be separated by the counter and nozzle rollers, not at the top and bottom of each

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portion of the web to be folded. Further, Kishine's oscillatory shooter assembly folds the web in zigzag fashion only along the cross perforations, not the cut lines, and none of the folds in the web coincides with a cut line. Finally, Kishine's cutting assembly operates only when a mark is detected by the sensor, not continuously as the web travels along the web traveling path. Although the Kishine apparatus arguably could be controlled to operate in accordance with the functional claim limitations at issue (we see no suggestion in Kishine to actually do so), it is not so controlled as described in the reference, and hence does not embody structure expressly or inherently capable of performing the specified functions.

Thus, Kishine fails to teach each and every element of the apparatus set forth in independent claims 9, 16 and 17. Accordingly, we shall not sustain the standing 35 U.S.C. § 102(b) rejection of claims 9, 16 and 17, and dependent claims 10 through 15 and 18, as being anticipated by Kishine.

#### SUMMARY

The decision of the examiner to reject claims 9 through 18 is reversed.

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REVERSED

CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	
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LAWRENCE J. STAAB	)	
Administrative Patent Judge	)	INTERFERENCES
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JOHN P. MCQUADE	)	
Administrative Patent Judge	)	

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