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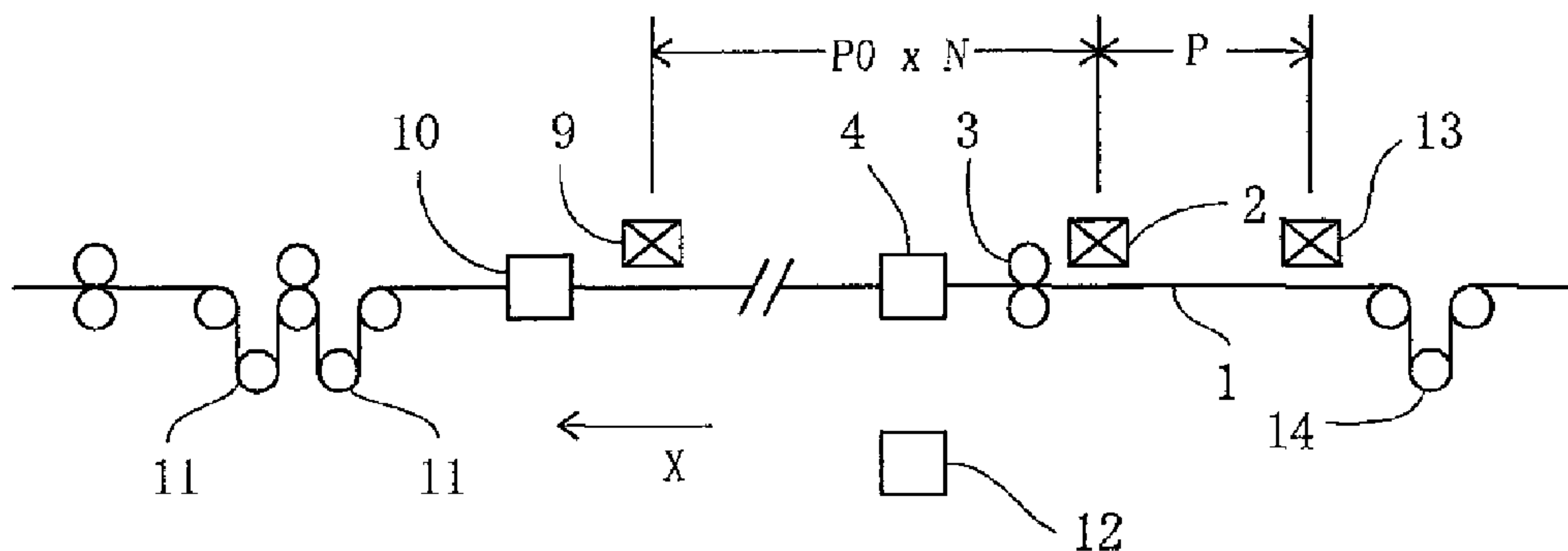
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(54) **Titre : APPAREIL DE CORRECTION DU PAS D'ESPACEMENT POUR PELLICULE DE PLASTIQUE**

(54) **Title: PRINT PITCH CORRECTING APPARATUS FOR PLASTIC FILM**



(57) **Abrégé/Abstract:**

The present invention is intended to correct print pitches P at which a pattern A is printed on a plastic film 1 repeatedly. A first optical sensor detects positions at which the pattern A is printed on the plastic film 1 repeatedly, to measure the print pitches P individually. A first stretching device 4 stretches the plastic film 1 after measuring the print pitch P to correct the print pitches P individually. A second optical sensor detects the positions after correcting the print pitch P to measure a sum of print pitches $P(1)+P(2)+\dots+P(N)$ of a number of patterns A . A second stretching device 10 stretches the plastic film 1 after measuring the sum of print pitches to correct the sum of print pitches.

Abstract

The present invention is intended to correct print pitches P at which a pattern A is printed on a plastic film 1 repeatedly. A first optical sensor detects positions at which the pattern A is printed on the plastic film 1 repeatedly, to measure the print pitches P individually. A first stretching device 4 stretches the plastic film 1 after measuring the print pitch P to correct the print pitches P individually. A second optical sensor detects the positions after correcting the print pitch P to measure a sum of print pitches $P(1)+P(2)+\dots+\dots+P(N)$ of a number of patterns A . A second stretching device 10 stretches the plastic film 1 after measuring the sum of print pitches to correct the sum of print pitches.

Print Pitch Correcting Apparatus for Plastic Film

Field of the Invention

The invention relates to an apparatus for correcting print pitches at which a pattern is printed on a plastic film repeatedly.

Background of the Invention

For example, in a machine for successively making plastic bags each of which includes a pattern printed thereon, a plastic film is fed longitudinally thereof. The plastic film includes the pattern printed thereon repeatedly, with a print pitch being predetermined. The plastic film is fed intermittently for a length corresponding to the print pitch and stopped temporarily whenever being fed intermittently. In general, plastic films are superposed with each other. The plastic films are then heat sealed with each other by a heat seal device and cross cut by a cross cutter whenever being fed intermittently and when being stopped temporarily, to successively make plastic bags.

In this case, conformity in pattern is required between the plastic films. On the other hand, minute errors must exist in the print pitches of plastic film to be accumulated, resulting in a discrepancy in pattern between the plastic films. In order to overcome this problem, there has been proposed an apparatus for correcting the print pitches, as disclosed in Japanese Patent No. 4,121,722.

In the apparatus of the patent, a plurality of optical sensors are disposed at a path along which the plastic films are fed, to detect and compare positions at which the patterns are printed on the plastic films repeatedly. In addition, the apparatus is arranged to heat a specific film partially to stretch it by tension at a position predetermined upstream of the optical sensors when the specific film goes ahead of other films. The apparatus can therefore correct the print pitches, conformity in pattern being obtained between the plastic films.

However, the apparatus can merely correct the print pitches of the

