



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) **EP 1 450 214 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

Note: Bibliography reflects the latest situation

(15) Correction information:  
**Corrected version no 1 (W1 A1)**  
**INID code(s) 71**

(51) Int Cl.7: **G03G 15/01**, H04N 1/60,  
**G06T 5/00**

(48) Corrigendum issued on:  
**08.12.2004 Bulletin 2004/50**

(43) Date of publication:  
**25.08.2004 Bulletin 2004/35**

(21) Application number: **03028556.3**

(22) Date of filing: **11.12.2003**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR**  
**HU IE IT LI LU MC NL PT RO SE SI SK TR**  
Designated Extension States:  
**AL LT LV MK**

(72) Inventor: **Tone, Takeharu, c/o Ricoh Company, Ltd.**  
**Ohta-ku, Tokyo 143-8555 (JP)**

(74) Representative: **Schwabe - Sandmair - Marx**  
**Stuntzstrasse 16**  
**81677 München (DE)**

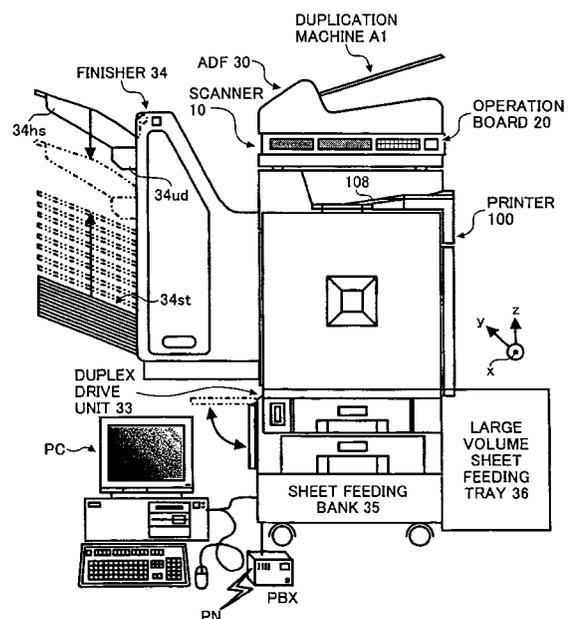
(30) Priority: **16.12.2002 JP 2002363595**

(71) Applicant: **Ricoh Company, Ltd.**  
**Tokyo 143-8555 (JP)**

(54) **Data conversion system for image processing and image forming apparatus**

(57) Disclosed is a system of image data conversion, capable of setting conversion characteristics with more ease even for data having mixed image attributes such as graphics including characters, drawings, photographs, and of reducing the amount of data to be prepared for, eg, gamma conversion and the size of memory required. The conversion system includes processing elements (PE1, PE2, PE3) in a processor array, each including at least an input data register (RO), character registers (R1, R2, R3), an attribute register (R4, RM), and a global processor (148), so that a calculator (MUX, ALU, T) in each of the processing elements operates to select, and store in the character registers, the data set,  $x_i$ ,  $y_i$ , and  $a_i$ , corresponding to attribute data stored in the attribute register, to be conversion processed subsequently according to an expression stored in the global processor. The global processor assumes overall control such as writing raster image data  $x$  into each processing element, corresponding to each attribute data from a data memory (146) to character registers, imparting an operation instruction set to each calculator for performing the data conversion, and outputting conversion processed data  $y_i$  written into an output register (R5).

FIG. 1



EP 1 450 214 A8