

Title (en)  
Document handling apparatus and method.

Title (de)  
Gerät und Verfahren zum Ausgeben von Dokumenten.

Title (fr)  
Dispositif et procédé pour la mise en circulation de documents.

Publication  
**EP 0022680 A1 19810121 (EN)**

Application  
**EP 80302390 A 19800716**

Priority  
US 5785579 A 19790716

Abstract (en)  
An automatic pre-collation duplex copying apparatus (10, 20) and method in which original documents having either an odd or even number of pages may be recirculatively copied (26) in reverse serial order yet provide properly collated output duplex copy sets. A simplex/duplex copying system is disclosed in which, when an odd number of document sheets are detected (29, 31, 100) in a first, non-copying, circulation of the document sheets, the copying of the last and subsequent alternate document sheets is inhibited during the first copying circulation, whereas if an even number of document sheets are detected, the copying of the second and subsequent alternate document sheets is inhibited during this first copying circulation, and these different copying sequences are reversed for the last copying circulation. All document sheets are copied during the intermediate circulations. A compatible duplex/duplex copying system is also disclosed.

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IPC 8 full level  
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Citation (search report)  
• DE 2605822 A1 19760819 - CANON KK  
• AT 279353 B 19700310 - RANK XEROX LTD  
• US 4162844 A 19790731 - TRAISTER ROBERT L [US], et al  
• US 4159500 A 19790626 - BAUMBACH BERTRAM W [US], et al  
• US 4125325 A 19781114 - BATCHELOR PHILLIP J, et al  
• US 3937454 A 19760210 - COLWILL RICHARD H

Cited by  
EP0103661A1; EP0529692A3; EP0264852A3; DE3232210A1; US5409203A; EP0548698A3; EP0238761A3; EP0293038A3

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