

Title (en)  
DISPLAY SYSTEM WITH MULTIPLE SCROLLING REGIONS

Publication  
**EP 0059349 B1 19860806 (EN)**

Application  
**EP 82101013 A 19820211**

Priority  
• US 23731681 A 19810223  
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Abstract (en)  
[origin: EP0059349A2] A data display and management system includes a microprocessor (10) whose functions are implemented by instructions in data from a directly connected main memory (48). A mass data storage memory (52) is connected to the main memory (48) and has permanently stored instructions set therein for the microprocessor (10). A display control system which operates asynchronously with the microprocessor includes a display controller (16), display memory (96, 104), character memory means, and a visual character attribute generator (94). By linking one or more row attribute bytes, or pointers, to each row of characters stored in the display memory (96) the display controller (16) performs character and row manipulation on a display device without transferring whole blocks of data in the display memory (96). Multi-region display segmentation into horizontal and vertical split regions, smooth or discrete scrolling of individual regions, and various editing functions are achieved by modifying the associated display memory pointers.

IPC 1-7  
**G09G 1/16**

IPC 8 full level  
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CPC (source: EP)  
**G09G 1/007** (2013.01); **G09G 5/14** (2013.01)

Cited by  
EP0178897A3; SG101465A1; US4769637A; GB2176979A; EP0185293A3; EP0185905A1; US4663615A; EP0163032A3; EP0134423A3; EP0140555A3; EP0145529A3; EP0185904A1; EP0133903A3; US5696540A; US6646651B1

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**EP 82101013 A 19820211**; DE 3272407 T 19820211; JP 20431891 A 19910814; JP 2726382 A 19820222