

Mann's HDR (High Dynamic Range) imaging invention is used in nearly every commercially manufactured camera, including the Apple iPhone:

“The first report of digitally combining multiple pictures of the same scene to improve dynamic range appears to be Mann.³” -- M. A. Robertson et al.

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References

1. S. Mann and R. W. Picard, “Video orbits of the projective group: A simple approach to featureless estimation of parameters,” *IEEE Trans. Image Process.* 6(9), 1281–1295 (Sep. 1997).
2. C. W. Wyckoff, “An experimental extended exposure response film,” in *SPIE Newsletter*, pp. 16–20 (June/July 1962).
3. S. Mann, “Compositing multiple pictures of the same scene,” *Proc. 46th Annual IS&T Conf.*, Boston, MA, pp. 50–52, May 9–14, 1993.
4. S. Mann and R. W. Picard, “On being ‘undigital’ with digital cameras: Extending dynamic range by combining differently exposed pictures,” *IS&T’s 48th Annual Conf.* Washington, D.C., pp. 422–428, May 7–11, 1995.

United States Patent 5,828,793 Mann

[54] **METHOD AND APPARATUS FOR PRODUCING DIGITAL IMAGES HAVING EXTENDED DYNAMIC RANGES**

[75] **Inventor: Steve Mann, Cambridge, Mass.**

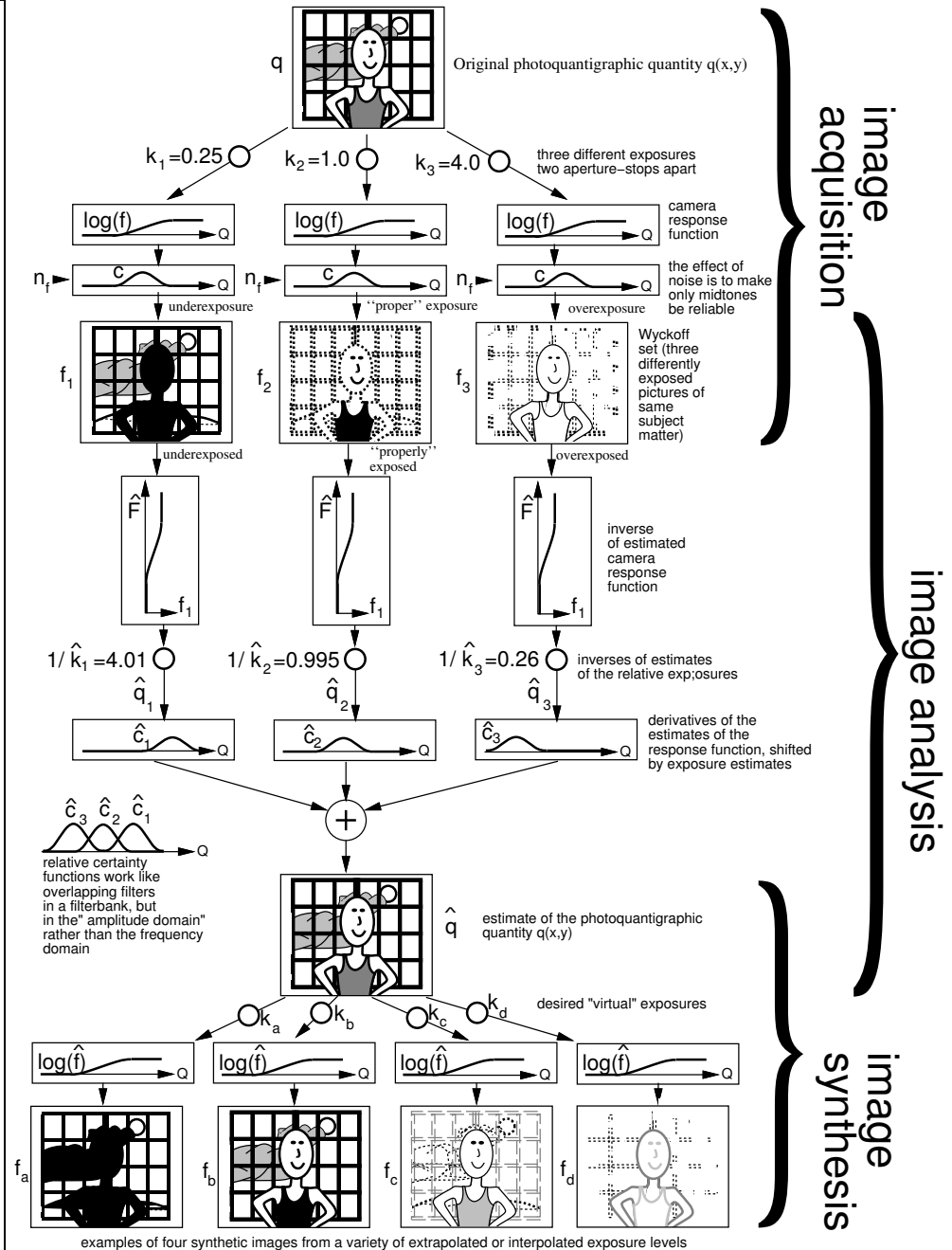
[73] **Assignee: Massachusetts Institute of Technology, Cambridge, Mass.**

[22] **Filed: May 6, 1996**

OTHER PUBLICATIONS

Mann, Steve; “Compositing Pictures of the Same Scene,” Massachusetts Institute of Technology, Cambridge, MA 02139.

Mann, Steve; “Lightspace,” MIT Media Laboratory, Information and Entertainment Systems Group, Dec. 1992.



HDR (High Dynamic Range) Imaging, and Computational Photography, Steve Mann, 1992