Patent title:	**Method for making the comparison between a continuous value analogue signal and a continuous value digital signal and circuit architecture configured to carry out the aforesaid method**
FBK center:	CMM
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Proprietor(s):	Fondazione Bruno Kessler (Bruno Kessler Foundation)
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Patent family:	IT102017000123149 (A1) — 2019-04-30; WO2019087041 (A1) — 2019-05-09
Application(s):	Surveillance and monitoring applications
Keyword(s):	Image sensors, Energy-efficient vision sensors
Abstract:	A method for making the comparison between a continuous value analogue signal (S1) and a continuous value digital signal (S2), which provides the steps of: defining a ramp analogue signal (RAMP) having linearly variable value over time by periodically varying, for each time interval belonging to first predetermined time intervals (ck1), a first digital numerical value (cnt1) by a predetermined quantity and converting

	it into the ramp analogue signal (RAMP); simultaneously comparing, at each of the first predetermined time intervals (ck1), the value of the ramp analogue signal (RAMP) with the analogue signal (S1) and the first digital numerical value (cnt1) with the digital signal (S2); verifying at which of the first predetermined time intervals (ck1) the value of the ramp analogue signal (RAMP) equals the analogue signal (S1) and at which of the predetermined time intervals (ck1) the first digital numerical value (cnt1) equals the digital signal (S2); defining the time window (WIND) between the first equality and the second equality; increasing a second digital numerical value (cnt2) within the time window (WIND) for each time interval belonging to second predetermined time intervals (ck2).