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**Burnt by the Sun: Jack Kilby and the '70s Solar Boom**

CYRUS MODY, Rice University

Much has been written, by both scientists and historians, about the contributions of Jack Kilby (co-winner of the 2000 Nobel Prize in Physics) to the invention of the integrated circuit and semiconductor microelectronics more generally. The story goes that Kilby conceived of the integrated circuit in 1958 during his first weeks working for Texas Instruments. Considerably less well known, however, is that Kilby took a leave of absence from TI in 1970 to become a consultant and independent inventor. The projects Kilby chose to pursue – from teaching machines to electronic checkwriters to offering advice to the military – offer insights into how establishment scientists and engineers thought about science's role in solving America's social and economic problems in the dreary 1970s. I focus in particular on Project Illinois, a residential solar energy system that Kilby and two colleagues proposed in the wake of the OPEC embargo, and which Texas Instruments developed almost to the point of large-scale manufacturing. The cancelation of Project Illinois in 1983 – which precipitated Kilby's final resignation from TI and retreat from active research – tells us a great deal about the frustrations of doing “socially relevant” science and engineering in the 1970s, and possibly also today.