

Figure 11.14 The Black & Veatch conceptual design for a high-concentration photovoltaic array. (Copyright © 1984. Electric Power Research Institute. *AP-3263. Conceptual Design for a High-Concentration (500X) Photovoltaic Array.* Reprinted with permission)



Figure 11.15 Static concentrator formed by an oil-filled CPC with bifacial cells

years of research were required to develop a UV-stable interface that had sufficiently low surface recombination velocity [31].

In 1989, EPRI decided to have a contract solicitation to continue commercialization of high-concentration systems. Two companies, SunPower Corporation and MACom/Phi (later spun out into a start-up called Amonix), were awarded contracts. SunPower explored reflective optics using parabolic dishes as well as heliostats [32] and Amonix continued the development of Fresnel modules using a simplified approach, the integrated backplane