either Alias or Wavefront free to contract to produce entertainment graphics software for other hardware manufacturers.

Instead, the Commission chooses to rely on vertical foreclosure theory to impose requirements that fail to preserve existing competition and that ultimately may create inefficiency and reduce competition. To the extent that any vertical problems should concern us, they would be resolved by stopping the horizontal transaction. The proposed decision and order having failed to achieve straightforward relief for the real competitive problem, the combination of Alias and Waterfront, I dissent

Dissenting Statement of Commissioner Roscoe B. Starek, III in the Matter of Silicon Graphics, Inc. (Alias Research, Inc., and Wavefront Technologies, Inc.)

File No. 951-0064

I respectfully dissent from the Commission's decision to initiate this proceeding against Silicon Graphics, Inc. ("SGI"). The proposed complaint alleges anticompetitive effects arising from the vertical integration of the leading manufacturer of entertainment graphics workstations, SGI, with two leading suppliers of entertainment graphics software, Alias Research, Inc., and Wavefront Technologies, Inc.1 I am not persuaded that these vertical acquisitions are likely "substantially to lessen competition" in violation of section 7 of the Clayton Act, 15 U.S.C. 18. Moreover, even if one assumes the validity of the theories of anticompetitive effects, the proposed order does not appear to prevent the alleged effects and may create inefficiency.

The Commission alleges, inter alia, that the acquisitions will reduce competition through two types of foreclosure: (i) Nonintegrated software vendors will be excluded from the SGI platform; and (ii) rival hardware manufacturers will be denied access to Alias and Wavefront software, without which they cannot effectively compete against SGI.² Vertical foreclosure

theories generally provide a weak basis for Section 7 enforcement;³ and this double foreclosure scenario has particular problems, both logical and factual.

In general, the two types of foreclosure tend toward mutual exclusion. The very possibility of excluding independent software producers from the SGI-platform suggests the means by which competing workstation producers will avoid foreclosure. The nonintegrated software producers surely have incentives to supply the "foreclosed" workstation producers, and each workstation producer has incentives to induce nonintegrated software suppliers to write for its platform. Otherwise, "we are left to imagine eager suppliers and hungry customers, unable to find each other, forever foreclosed and left to languish."4 This predicament is improbable in the dynamic markets at issue.

The acquisition appears very unlikely to give rise to significant, anticompetitive foreclosure of nonintegrated software producers. The proposed complaint's own description of the premerger state of competition tends to exclude this possibility. The complaint alleges that software producers other than Alias, Wavefront, and Microsoft's SoftImage are either competitively insignificant or complementary, and that there is virtually no likelihood of entry by producers of substitutable SGI compatible software owing to the entrenched positions of Alias and Wavefront. If both propositions are true, then the merger cannot appreciably foreclose software entry or expansion. One cannot find both that the premerger supply elasticity of substitutable software is virtually zero and that the merger would result in the substantial post-merger foreclosure of software producers. In addition, SGI has strong incentives to induce expanded supply of SGI-compatible software: increasing the supply of compatible software (or of any complementary product) increases the demand for SGI's workstations.

It is perhaps more plausible that the transaction could result in reduced supplies of software, or higher costs of obtaining software, for SGI's workstation rivals. Even so, this would be primarily a consequence of the horizontal aspects of the transaction i.e., the combining of two of the three principal vendors of the relevant software—rather than the vertical aspects. The Commission eschews an enforcement action based on a horizontal theory, however, because of its cost in foregone efficiencies. If the horizontal software combination is efficiency-enhancing, the net anticompetitive impact of these transactions comes from SGI's vertical integration with Alias and Wavefront. If this is so, why not seek injunctive relief against the vertical integration, and avoid the costs of the ineffective regulatory remedy presented in the

proposed order?

There are at least two reasons for rejecting this course of action. The first is that there are demonstrable efficiencies associated with exclusive arrangements between hardware and software vendors;5 the second is that the merger's anticompetitive effects are commensurately difficult to establish. More generally, in order to establish SGI's preeminence among producers of entertainment graphics workstations, the complaint alleges that entry into such hardware is extremely unlikely because of the substantial costs of porting SGI-specific software (especially the "high end" variants) to non-SGI platforms. This undermines the contention that the merger would induce a substantial lessening of competition in the entertainment graphics workstation market.6

¹The Commission apparently finds that the horizontal combination of Alias and Wavefront is not anticompetitive on net: the order addresses alleged vertical problems only.

² Precedent for this "double foreclosure" analysis lies uncomfortably in A.G. Spalding & Bros., Inc., 56 F.T.C. 1125 (1960), in which the Commission rejected Spalding's acquisition of Rawlings Manufacturing Co. Before the acquisition, Spalding did not manufacture baseball gloves, but instead purchased them for resale; Rawlings manufactured baseball gloves and sold them to other resellers. The Commission found that, "by acquiring Rawlings, Spalding can not only prevent competitors from purchasing (gloves) from Rawlings but can also

foreclose manufacturers of (gloves) from access to Spalding as a purchaser thereof." 56 F.T.C. at 2269.

³For a description of criticisms of pre- and post-Chicago theories of foreclosure, see David Reiffen and Michael Vita, *Is there New Thinking on Vertical Mergers*? A comment, 63 ANTITRUST L.J. (1995). See also Roscoe B. Starek, III, "Reinventing Antitrust Enforcement? Antitrust at the FTC in 1995 and Beyond," Remarks at "A New Age of Antitrust Enforcement: Antitrust in 1995," Marina Del Rey, CA, Feb. 24, 1995.

⁴ Robert Bork, THE ANTITRUST PARADOX 232 (1978). Referring to A.G. Spalding, Bork concludes that "the Commission could cure (this problem) by throwing an industry social mixer."

⁵ A software producer's premerger exclusive commitment to SGI suggests an efficiency rationale for its subsequent integration with SGI: to avoid the expropriation by SGI of the software producer's SGI-specific assets. This is a well established procompetitive rationale for vertical mergers. See, e.g., Benjamin Klein, Robert G. Crawford, and Armen A. Alchian, Vertical Integration, Appropriable Rents, and the Competitive Contracting Process, 21 J.L. & ECON. 297 (1978); Kirk Monteverde and David J. Teece, Supplier Switching Costs and Vertical Integration in the Automobile Industry, 13 BELL J. ECON. 206 (1982a); Kirk Monteverde and David J. Teece, Appropriable Rents and Quasi-Vertical Integration, 25 J.L. & ECON. 321 (1982): Benjamin Klein. Vertical Integration as Organizational Ownership: The Fisher Body-General Motors Relationship Revisited, 4 J.L., ECON, & ORG, 199 (1988).

⁶All of the preceding assumes, arguendo, defining the relevant markets that are most favorable to the Commission's theory of competitive harm from vertical integration. Whether these narrowly defined markets are appropriate is questionable. For example, to the extent that PCs are becoming closer substitutes for entertainment graphics workstations, it is increasingly unlikely that a prerequisite for anticompetitive effects from