

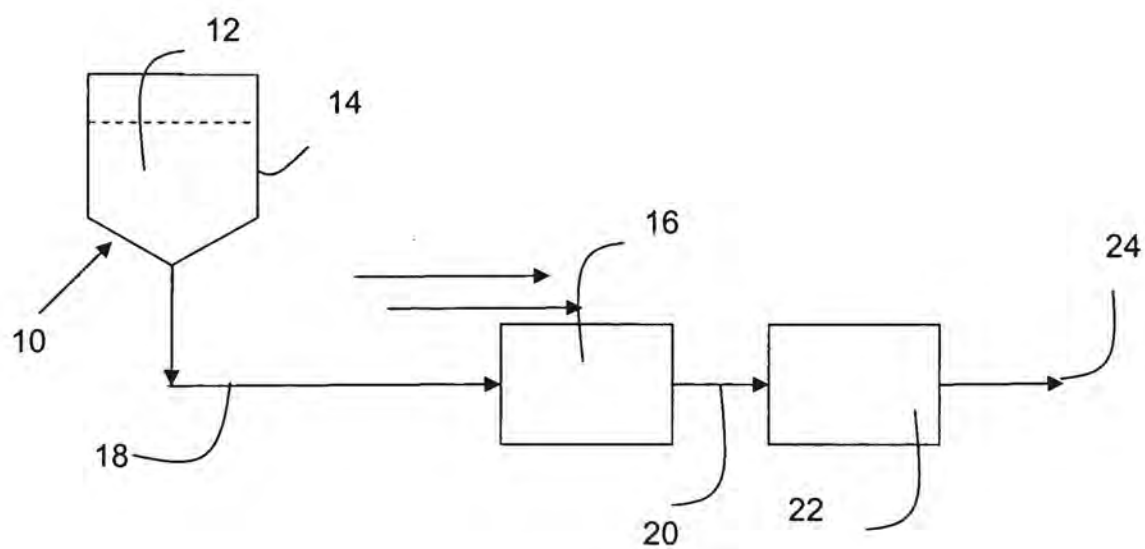


FIG. 1

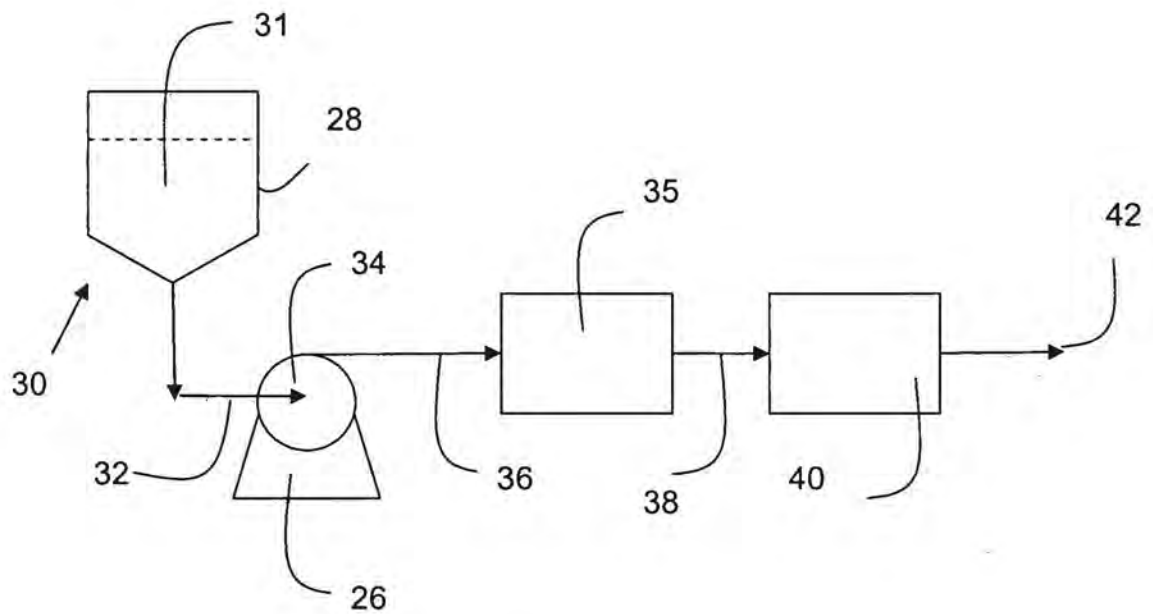


FIG. 2

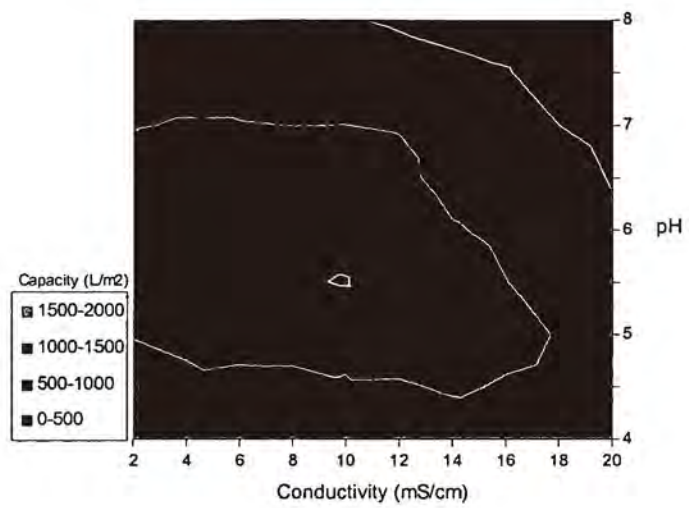


FIG. 3

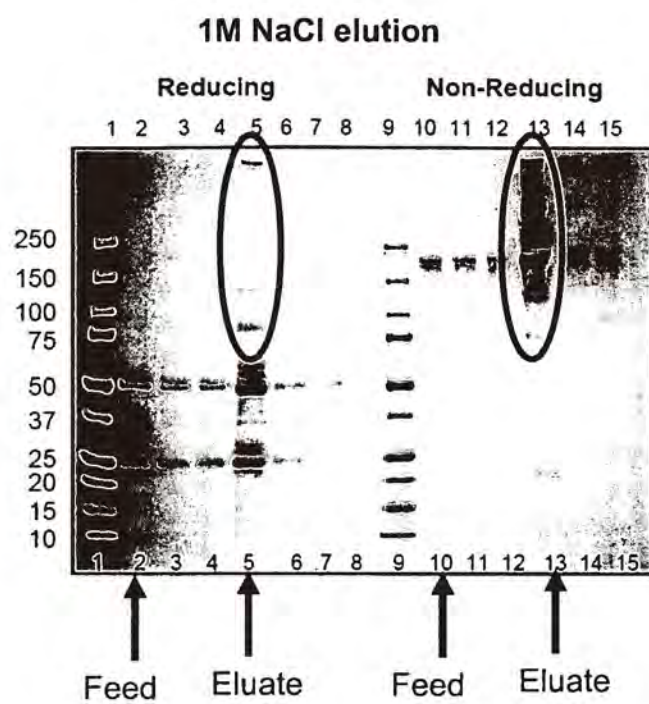


Fig. 4

Deionized water elution

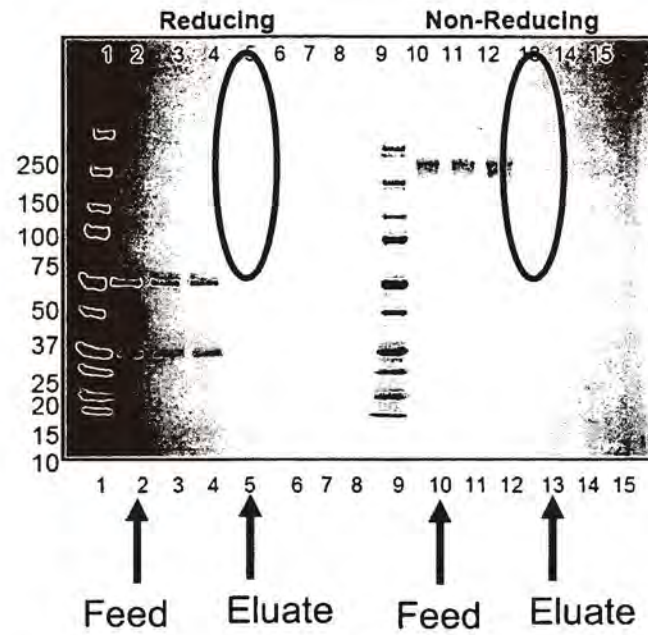


Fig. 5

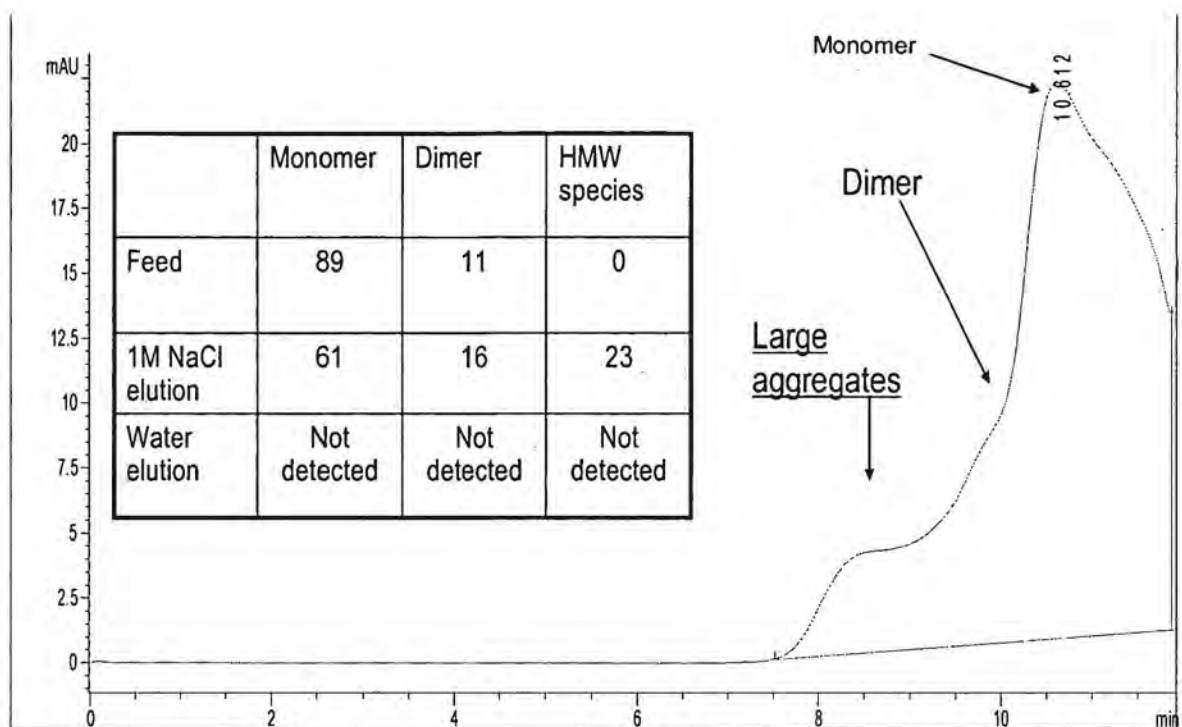


Fig. 6

Decoupled Mode

Advantages

- Most commonly used in industry
- Maximum LRV claim
- Less complicated set-up

Disadvantages

- Increased validation time
- Potential for reduced throughput following addition of virus spike

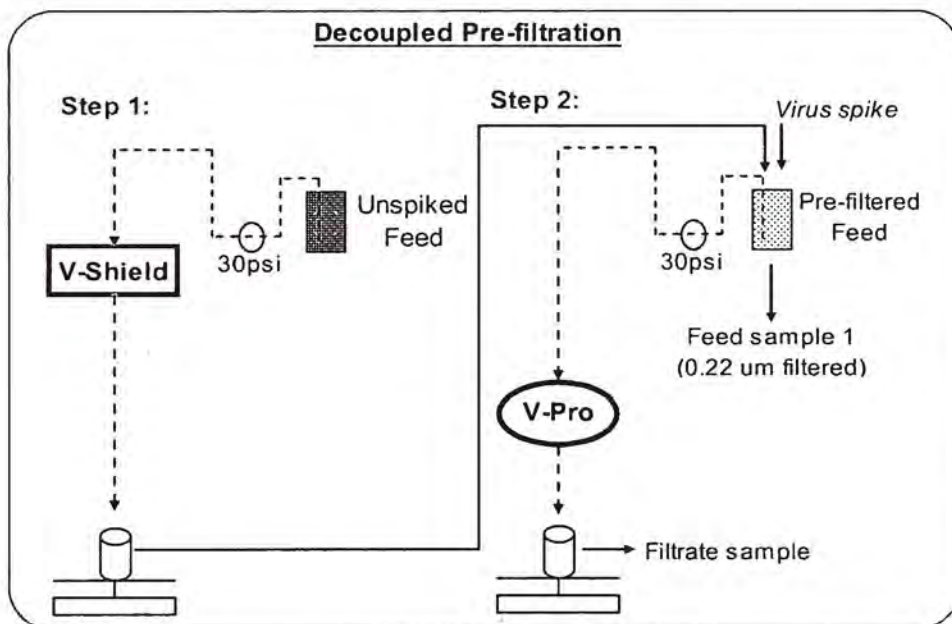


Fig. 7

Spike-Across (coupled) Mode

Advantages

- o More representative of scaled process
- o Minimal run time

Disadvantages

- o Potential virus loss across V-Shield

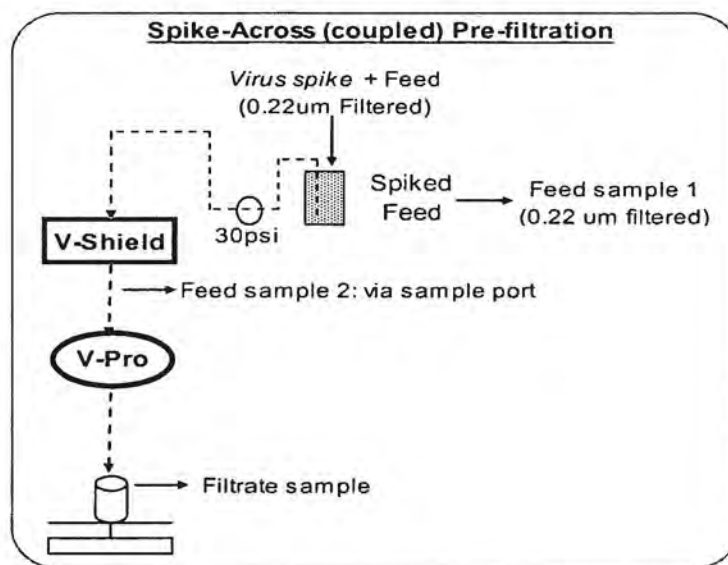


Fig. 8