

IVO Pre-Patent Technical Dossier — Version 1.2

This version expands the IVO Model with formal definitions, diagrams (text-based), an AI reasoning flowchart, and a reference implementation in pseudocode. It strengthens the model's prior-art position and clarifies its computational structure.

1. Formal Definitions

Definition 1 — I (Observer-State Operator): Clarifies and reduces raw input into a clean, actionable representation $I(S)$. Definition 2 — V (Directional Beam Operator): A tunable spectrum used to filter, focus, or broaden the clarified state. Definition 3 — O (Field-State Operator): Expands a directionally modulated state into a structured potential field. Definition 4 — M (Medium Layer): Represents the domain or substrate in which the IVO cycle manifests. Definition 5 — E (Emergent Output): The final transformed system state produced by the full IVO cycle: $E = I \cdot V \cdot O \cdot M$. Definition 6 — Reduction Mode: $O \rightarrow V \rightarrow I \rightarrow E$. Collapse toward clarity. Definition 7 — Expansion Mode: $I \rightarrow V \rightarrow O \rightarrow$ (multi-state zone). Opening possibility. Definition 8 — Multi-State Zone: Intermediate reversible zone enabling exploration before collapse. Definition 9 — IVO Kernel in AI: Any computational system implementing explicit I, V, O, M stages.

Figure 1: IVO Triadic Operator Diagram

I (Observer) \downarrow V (Directional Beam) \downarrow O (Field Operator) M is represented as the ground layer beneath the cycle. E emerges outward from the cycle after the full transformation.

Operator Table

Operator	Role	Mechanic
I	Define core state	Reduction / Clarification
V	Directional modulation	Beam / Spectrum
O	Expand potentials	Field / Scenario space
M	Domain substrate	Physical / Informational

Figure 2: V-Spectrum Diagram

Upper Bound (High Coherence / Narrow Focus) ----- Active V-Window
(Directional Tuning) ----- Lower Bound (Low Coherence / Broad Exploration)

Figure 3: Expansion vs Reduction Modes

Expansion Mode: $I \rightarrow V \rightarrow O \rightarrow$ (Multi-State Zone) Reduction Mode: $O \rightarrow V \rightarrow I \rightarrow E$

4. IVO-AI Reasoning Flowchart

1. Input Acquisition 2. I-Stage: Clarify and reduce the core question. 3. V-Stage: Apply directional modulation (focus or exploration). 4. O-Stage: Expand into fields, scenarios, interpretations. 5. M-Integration: Apply domain rules, constraints, data. 6. E-Output: Collapse to final emergent decision or explanation.

Appendix A — Reference Implementation (Pseudocode)

```
function I_stage(input):
    state = preprocess(input)
    core = identify_core_issue(state)
    frame = remove_noise(core)
    return frame

function V_stage(I_state, profile):
    filters = build_filters(profile)
    tuned = apply_filters(I_state, filters)
    return tuned

function O_stage(V_state):
    options = generate_options(V_state)
    scenarios = simulate_scenarios(options)
    field = structure_as_field(scenarios)
    return field

function M_integration(field, medium):
    evaluated = []
    for candidate in field:
        score = evaluate_in_medium(candidate, medium)
        evaluated.append((candidate, score))
    return evaluated

function collapse_to_E(evaluated_field):
    best = select_best_candidate(evaluated_field)
    explanation = derive_explanation(best, evaluated_field)
    return { "result": best, "explanation": explanation }

function IVO_kernel(input, medium, profile):
    I_state = I_stage(input)
    V_state = V_stage(I_state, profile)
    O_field = O_stage(V_state)
    evaluated = M_integration(O_field, medium)
    E_output = collapse_to_E(evaluated)
    return E_output
```

Prior Art Declaration

This Version 1.2 serves as timestamped public documentation. All structures, terminology, logic, diagrams, and computational cycles originate from the IVO Model authored by Ivo. This prevents third-party patent claims and establishes clear authorship.